THE

ENGLISH READER;

CONTAINING

A Selection of Pieces in Prose,

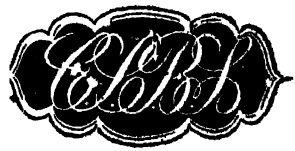
SUITED TO

THE CAPACITIES OF INDIAN YOUTH,

AND ADAPTED TO

IMPROVE THE YOUNGER CLASSES OF LEARNERS IN READING, BY A PROGRESSIVE ARRANGEMENT OF THE LESSONS.

No. IV.



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CONTENTS

CHAP. I.—SELECT SENTENCES.

Page 1 to 10.

CHAP. II.—NARRATIVE PIECES.

LESSON 1. Ingenuity and Industry rewarded, p. 11. 2. The same (concluded,) p. 12. 3. The pious Sons, p. 14. 4. Filial Sensibility, *ib.* 5. The secret of being always satisfied, p. 16. 6. Beneficence its own Reward, p. 17. 7. The Compassionate Judge, p. 18. 8. The Generous Negro, p. 19. 9. Heroism and Generosity of a Peasant, p. 21. 10. Chinese Generosity, p. 22. 11. Virtue in Humble Life, p. 23. 12. The same (concluded,) p. 25. 13. The Noble Basket-maker, p. 27..pp. 11—29.

CHAP. III.—DIDACTIC PIECES.

LESSON 1. On Filial Piety, p. 29. 2. Love between Brothers and Sisters, p. 30. 3. Benevolence, *ib.* 4. Pity, p. 31. 5. Fortitude, p. 32. 6. Application, p. 33. 7. Emulation, p. 34. 8. On the period and uses of Human Life, p. 35. 9. The same (concluded,) p. 36. 10. Diversions, p. 37. 11. Respect and Affection due from Pupils to their Tutors, p. 38. 12. On Forgiveness, p. 40. 13. On Gratitude, p. 41. 14. Ingratitude to our Supreme Benefactor is highly culpable, p. 42. 15. Speculation and Practice, p. 43 ....pp. 29—44

CHAP. IV.—DESCRIPTIVE PIECES.

LESSON 1. The Covering of different Animals, p. 44. 2. The Elephant, p. 46. 3. The Camel, p. 47. 4. The Rhinoceros, p. 49. 5. The Hippopotamus, p. 50. 6. The Camelopard, p. 52. 7. The Hyena, p. 54. 8. The Porcupine, p. 56. 9. The Opossum, p. 57. 10. The Kangaroo, p. 58. 11. The Fox, p. 59. 12. The Seal, p. 61. 13. The Leopard and Hunting Leopard, p. 63. 14. The Dog, p. 64. 15. Sagacity displayed in the Habitations of Beavers, p. 66. 16. The Ichneumon, p. 68. 17. The Monkey, p. 69. 18. The same (concluded,) p. 70. 19. The Bengal Lions, p. 73. 20. The Arctic Walrus, p. 75. 21. Of Ruminating Ani-

mals, p. 78. 22. The Buffalo, p. 79. 23 The Antelope, p. 81. 24 The Musk-Deer, p. 82. 25 The Rein-Deer, p 83. 26 The same (concluded,) p. 85. 27. Domestic Economy of Birds, p 87. 28. The same (concluded,) p, 88. 29. The Parrot, p 90 30 The Bird of Paradise, p 92. 31. The Mocking-Bird, p. 94 32. The Eagle, p. 96 33. The same (concluded,) p. 97. 34. The Pelican, p 99 35 The Crested Penguin, p. 102. 36. The Flamingo, p. 103 37. The Stork, p. 105. 38. The Gigantic Crane, p. 107. 39. The Peacock, p 109. 40. The Nightingale, p 111. 41. The Humming-Bird, p 113 42. The same (concluded,) p. 114. 43. The Whale p 116 44 The same (concluded,) p. 119 45. The Flying Fish, p 121. 46. The Gold-Fish, p 123. 47. The Land Crab, p. 125 48. The Polype, p 127 49. The Metamorphoses of Insects, p 130. 50. The Bee, p 132 51. The Labour of the Bee, p 134 54. Butterflies and Moths, p 136 35 The same (concluded,) p 137. 54 The Lion-ant, p 139 53 The same (concluded) p. 140 56. The Spider, p. 141 57 The same (continued,) p. 143. 58. The same (continued,) p. 144. 59 The same (concluded,) p 146. 60 The Mamis, p 147 61. The Habitations of Animals, p. 150. 62. The Baman Tree, or Indian Fig, p. 152. 63 The Coffee Tree, p 153. 64. The Sugarcane, p 155. 65 Phenomena of the Vegetable Kingdom, p. 156. ..... pp. 44—157.

Chap. V.—Dialogues.

Dialogue 1. Eyes and No Eyes, or the Art of Seeing, p. 157. 2. On Emblems, p 165 3 Canute and his Courtiers, or, Flattery reproved, p. 169 4 The Art of Distinguishing, p 171. 5 The same (continued,) p. 172. 6 The same (continued,) p 173 7 The same (continued,) p. 174. 8 The same (continued,) p 175 9 The same (continued,) p. 177. 10. The same (concluded,) p. 178 11. On Man, p 179. pp. 157—185

Chap. VI.—Promiscuous Pieces.

Lesson 1. On Writing a good hand, p 187 2 Observations on the right method of Reading in order to obtain general and useful knowledge, p. 187. 3. Of Resolution, p 189 4. The Boy without a Genius, p. 190. 5 The same (continued,) p 192 6 The same (concluded,) p. 193. 7. True Heroism, p. 195. 8. Poor Richard, or the Way to Wealth, p. 197. 9. The same (continued,) p. 198. 10. The same (continued,) p. 200. 11. The same (continued,) p 201. 12. The same (continued,) p. 203. 13 The same (concluded,) p 205. 14. The Supreme Ruler of the World, p. 206. 15. The Whistle, p. 207. 16 Anecdote of Mungo Park, p 209. 17. The Hospitable Negro Woman, p 211. 18. The same (concluded,) p 212. 19. Industry better than Gold, p 214. 20. The same (continued,) p. 215. 21. The same (concluded,) p. 217 22. Anecdotes of the Dog, p. 219. 23. The Handsome and Deformed Leg, p. 221. 24 Catharina, Empress of Russia, p. 223 25. The same (continued,) p 225. 26. The same (continued,) p. 226. 27. The same (concluded,) p. 227. ..... pp. 185—228.

ENGLISH READER.

No. IV.

Chapter I.—SELECT SENTENCES.

Lesson 1.

1. Young people too often begin life with too much confidence in themselves. Alas! how little do they know the dangers which await them!

2. To repine at the improvement of others, and wish to deprive them of the praise they have deserved, is the sign of an envious and odious disposition.

3. We ought not to be proud or vain of the advantages we possess; but humbly endeavour to use them for the benefit of our fellow-creatures, and the glory of that great Being from whom we have received them.

4. If we consider how much the comfort or the uneasiness of all around us depends on the state of our own temper, we shall surely endeavour to render it sweet and accommodating.

5. When young persons are afflicted with illness, how greatly do they endear themselves to all about them by being tractable, considerate, gentle, and grateful! But how painful is it to see them peevish, self-willed, and unthankful!

6. A family where the great Father of the universe is duly reverenced; where parents are honoured and obeyed; where brothers and sisters dwell together in

love and harmony; where peace and order reign; where there is no law but the law of kindness and wisdom; is surely a most delightful and interesting spectacle.

Lesson 2.

1. The chief misfortunes that befall us in life can be traced to some vices or follies which we have committed.

2. Were we to survey the chambers of sickness and distress, we should often find them peopled with the victims of intemperance and sensuality, and with the children of vicious indolence and sloth.

3. To be wise in our own eyes, to be wise in the opinion of the world, and to be wise in the sight of our Creator, are three things so very different as rarely to coincide.

4. The corrupted temper and the guilty passions of the bad, frustrate the effect of every advantage which the world confers on them.

5. The external misfortunes of life, disappointments, poverty, and sickness, are light in comparison with those inward distresses of mind occasioned by folly, by passion, and by guilt.

6. No station is so high, no power so great, no character so unblemished, as to exempt men from the attacks of rashness, malice, or envy.

7. Moral and religious instruction derives its efficacy, not so much from what men are taught to know, as from what they are brought to feel.

8. When, upon rational and sober inquiry, we have established our principles, let us not suffer them to be shaken by the scoffs of the licentious, or the cavils of the sceptical.

Lesson 3.

1. When we observe any tendency to treat morals with disrespect and levity, let us hold it to be a sure indication of a perverted understanding, or a depraved heart.

2. Every degree of guilt, incurred by yielding to temptation, tends to debase the mind, and to weaken the generous and benevolent principles of human nature.

3. Society requires distinctions of property, diversity of conditions, subordination of ranks, and a multiplicity of occupations, in order to advance the general good.

4. The desire of improvement discovers a liberal mind, and is connected with many accomplishments and many virtues.

5. Innocence confers ease and freedom on the mind, and leaves it open to every pleasing sensation.

6. Moderate and simple pleasures relish high with the temperate: in the midst of his studied refinements the voluptuary languishes.

7. Gentleness corrects whatever is offensive in our manners; and, by a constant train of humane attentions, studies to alleviate the burden of common misery.

8. That gentleness, which is the characteristic of a good man, has, like every other virtue, its seat in the heart: and, let me add, nothing except what flows from the heart can render external manners truly pleasing.

Lesson 4.

1. Virtue, to become either vigorous or useful, must be habitually active; not breaking forth occasionally with a transient lustre, like the blaze of a comet; but regular in its returns, like the light of day: not like the aromatic gale, which sometimes feasts the sense;

but like the ordinary breeze, which purifies the air and renders it healthful.

2. The happiness of every man depends more upon the state of his own mind than upon any external circumstances: nay, more than upon all external things put together.

3. In no station, in no period, let us think ourselves secure from the dangers which spring from our passions. They beset every age, and every station; from youth to gray hairs, and from the peasant to the prince.

4. Riches and pleasures are the chief temptations to criminal deeds. Yet those riches, when obtained, may very possibly overwhelm us with unforeseen miseries: those pleasures may cut short our health and life.

5. Amusement often becomes the business instead of the relaxation of young persons; it is then highly pernicious.

6. He who waits for an opportunity to do much at once, may breathe out his life in idle wishes; and regret in the last hour his useless intentions and barren zeal.

Lesson 5.

1. God is the kindest and best of beings. He is our Father. He approves us when we do well; he pities us when we err; and he desires to make us happy for ever.

2. How greatly should we love so good and kind a Father! and how careful should we be to serve and please him!

3. Never insult the unfortunate, especially when they implore relief or assistance. If you cannot grant their requests, refuse them mildly and tenderly.

4. If you feel compassion for them, (and what good

heart can behold distress without feeling compassion?) be not ashamed to express it.

5. Listen to the affectionate counsels of your parents: treasure up their precepts; respect their riper judgment; and enjoy with gratitude and delight the advantages resulting from their society.

6. Bind to your bosom by the most endearing ties your brothers and sisters; cherish them as your best companions through the variegated journey of life; and suffer no jealousies and contentions to interrupt the harmony which should ever reign amongst you.

Lesson 6.

1. It is of great importance to us to form a proper estimate of human life; without either loading it with imaginary evils, or expecting from it greater advantages than it is able to yield.

2. Among all our corrupt passions there is a strong and intimate connection. When any one of them is adopted into our family, it seldom departs, until it has fathered upon us all its kindred.

3. Charity, like the sun, brightens every object on which it shines: a censorious disposition casts every character into the darkest shade it will bear.

4. Many men mistake the love for the practice of virtue; and are not so much good men as the friends of goodness.

5. Genuine virtue has a language that speaks to every heart throughout the world. It is a language which is understood by all.

6. In every region, every climate, the homage paid to it is the same. In no one sentiment were ever mankind more generally agreed.

7. The appearances of our security are frequently deceitful. When our sky seems most settled and serene, in some unobserved quarter gathers the little black cloud, in which the tempest ferments and prepares to discharge itself on our head.

Lesson 7.

1. In judging of others, let us always think the best, and employ the spirit of charity and candour. But, in judging of ourselves, we ought to be exact and severe.

2. Let him, that desires to see others happy, make haste to give while his gift can be enjoyed; and remember, that every moment of delay takes away something from the value of his benefaction.

3. And let him who purposes his own happiness reflect that, while he forms his purpose, the day rolls on, and "the night cometh, when no man can work."

4. What avails the show of external liberty to one who has lost the government of himself?

5. Can we esteem that man prosperous, who is raised to a situation which flatters his passions, but which corrupts his principles, disorders his temper, and finally oversets his virtue?

6. What miseries does the vicious man secretly endure! Adversity! how blunt are all the arrows of thy quiver, in comparison with those of guilt!

7. When we have no pleasure in goodness, we may with certainty conclude the reason to be, that our pleasure is all derived from an opposite quarter.

8. How strangely are the opinions of men altered by a change in their condition!

9. How many have had reason to be thankful for being disappointed in designs which they earnestly pur-

sued, but which, if successfully accomplished, they have afterwards seen, would have occasioned their ruin!

Lesson 8.

1. The present employment of time should frequently be an object of thought. What is the ultimate scope of our present pursuits and cares? Are they likely to produce anything that will survive the moment, and bring forth some fruit for futurity?

2. On whom does time hang so heavily as on the slothful and lazy? To whom are the hours so lingering? Who are so often devoured with spleen, and obliged to fly to every expedient which can help them to get rid of themselves?

3. Instead of producing tranquillity, indolence produces a fretful restlessness of mind; gives rise to cravings which are never satisfied; nourishes a sickly, effeminate delicacy, which sours and corrupts every pleasure.

4. We have seen the husbandman scattering his seed upon the furrowed ground. It springs up, is gathered into his barns, and crowns his labours with joy and plenty.

5. Thus the man who distributes his fortune with generosity and prudence is amply repaid by the gratitude of those whom he obliges; by the approbation of his own mind; and by the favour of heaven.

6. Temperance, by fortifying the mind and body, leads to happiness; intemperance, by enervating them, ends generally in misery.

7. If envious people were to ask themselves whether they would exchange their entire situation with the persons envied, (I mean their minds, passions, notions, as well as their persons, fortunes, and dignities,) I pre-

sume the self-love common to human nature would generally make them prefer their own condition.

Lesson 9.

1. Disease, poverty, disappointment, and shame, are far from being, in every instance, the unavoidable doom of man. They are much more frequently the offspring of his own misguided choice.

2. Intemperance engenders disease; sloth produces poverty; pride creates disappointment; and dishonesty exposes to shame.

3. The ungoverned passions of men betray them into a thousand follies; their follies into crimes; and their crimes into misfortunes.

4. At our first setting out in life, when yet unacquainted with the world and its snares, when every pleasure enchants with its smile, and every object shines with the gloss of novelty; let us beware of the seducing appearances which surround us, and recollect what others have suffered from the power of headstrong desire.

5. If we allow any passion, even though it be esteemed innocent, to acquire an absolute ascendant, our inward peace will be impaired. But if any which has the taint of guilt take early possession of our mind, we may date from that moment the ruin of our tranquillity.

6. Never adventure on too near an approach to what is evil. Familiarise not yourselves with it in the slightest instances without fear.

7. Listen with reverence to every reprehension of conscience; and preserve the most quick and accurate sensibility to right and wrong.

Lesson 10.

1. An amiable youth lamented, in terms of sincere grief, the death of a most affectionate parent.

2. His companion endeavoured to console him by the reflection that he had always behaved to the deceased with duty, tenderness, and respect.

3. "So I thought," replied the youth, "whilst my parent was living: but now I recollect, with pain and sorrow, many instances of disobedience and neglect, for which, alas! it is too late to make atonement."

4. Sir Isaac Newton possessed a remarkably mild and even temper. This great man, on a particular occasion, was called out of his study to an adjoining apartment.

5. A little dog named Diamond, the constant but incurious attendant of his master's researches, happened to be left among the papers; and threw down a lighted candle, which consumed the almost finished labours of some years.

6. Sir Isaac soon returned, and had the mortification to behold his irreparable loss. But, with his usual self-possession, he only exclaimed, "Oh Diamond! Diamond! thou little knowest the mischief thou hast done."

7. The benevolent John Howard, having settled his accounts at the close of a particular year, and found a balance in his favour, proposed to his wife to make use of it in a journey to London, or in any other amusement she chose.

8. "What a pretty cottage for a poor family it would build!" was her answer. This charitable hint met his cordial approbation, and the money was laid out accordingly.

Lesson 11.

1. When Aristotle was asked what a man could gain by telling a falsehood, he replied, "Not to be believed when he speaks the truth."

2. Sully, the great statesman of France, always retained at his table, in his most prosperous days, the same frugality to which he had been accustomed in early life.

3. He was frequently reproached by the courtiers for this simplicity; but he used to reply to them, in the words of an ancient philosopher:—

4. "If the guests are men of sense, there is enough for them: if they are not, I can very well dispense with their company."

5. Sir Philip Sidney, at the battle near Zutphen, was wounded by a musket-ball, which broke the bone of his thigh.

6. He was carried about a mile and a half to the camp; and, being faint with loss of blood, and parched with thirst through the heat of the weather, he called for drink.

7. It was immediately brought to him: but, as he was putting the vessel to his mouth, a poor wounded soldier, who happened at that instant to be carried past him, looked up to it with wishful eyes.

8. The gallant and generous Sidney took the bottle from his mouth, and delivered it to the soldier, saying, "Thy necessity is yet greater than mine."

Chapter II.—NARRATIVE PIECES.

Lesson 1.—*Ingenuity and Industry rewarded.*

1. A rich husbandman had two sons, the one exactly a year older than the other.

2. The very day the second was born, he set, in the entrance of his orchard, two young apple-trees of equal size; which he cultivated with the same care, and which grew so equally that no person could perceive the least difference between them.

3. When his children were capable of handling garden-tools, he took them one fine morning in spring to see these two trees, which he had planted for them, and called after their names: and, when they had sufficiently admired their growth, and the number of blossoms that covered them, he said:—

4. "My dear children, I give you these trees: you see they are in good condition. They will thrive as much by your care as they will decline by your negligence; and their fruit will reward you in proportion to your labour."

5. The youngest, named Edmund, was industrious and attentive. He busied himself in clearing his tree of insects that would hurt it; and he propped up its stem, to prevent its taking a wrong bent.

6. He loosened the earth about it, that the warmth of the sun and the moisture of the dews might cherish the roots. His mother had not tended him more carefully in his infancy than he tended his young apple-tree.

7. His brother, Moses, did not imitate his example:

he spent a great deal of time on a mount that was near, throwing stones at the passengers in the road..

8. He went among all the little dirty country boys in the neighbourhood, to fight with them; so that he was often seen with broken shins and black eyes, from the kicks and blows he received in his quarrels.

9. In short, he neglected his tree so far that he never thought of it, till, one day in autumn, he by chance saw Edmund's tree so full of apples streaked with purple and gold, that, had it not been for the props which supported its branches, the weight of its fruit must have bent it to the ground.

10. Struck with the sight of so fine a tree, he hastened to his own, hoping to find as large a crop upon it; but, to his great surprise, he saw scarcely anything, except branches covered with moss, and a few withered leaves.

LESSON 2.—*Ingenuity and Industry rewarded.* (*concluded.*)

1. Full of passion and jealousy, he ran to his father, and said:—

2. "Father, what sort of a tree is that which you have given me? it is as dry as a broomstick; and I shall not have ten apples on it. My brother you have used better: bid him at least share his apples with me."

3. "Share with you!" said his father; so the industrious must lose his labour to feed the idle! Be satisfied with your lot: it is the effect of your negligence: and do not think to accuse me of injustice, when you see your brother's rich crop.

4. "Your tree was as fruitful and in as good order as his; it bore as many blossoms, and grew in the same soil; only it was not fostered with the same care. Edmund has kept his tree clear of hurtful insects; but you have suffered them to eat up yours in its blossoms.

5. "As I do not choose to let anything which God has given me, and for which I hold myself accountable to him, go to ruin, I shall take this tree from you, and call it no more by your name.

6. "It must pass through your brother's hands before it can recover itself; and from this moment both it and the fruit it may bear are his property.

7 "You may, if you will, go into my nursery, and look for another; and rear it to make amends for your fault: but, if you neglect it, that too shall be given to your brother for assisting me in my labour."

8. Moses felt the justice of his father's sentence, and the wisdom of his design. He therefore went that moment into the nursery, and chose one of the most thriving apple-trees he could find.

9. Edmund assisted him with his advice in rearing it, and Moses embraced every occasion of paying attention to it. He was now never out of humour with his comrades, and still less with himself; for he applied cheerfully to work: and in autumn he had the pleasure of seeing his tree fully answer his hopes.

10. Thus he had the double advantage, of enriching himself with a splendid crop of fruit, and at the same time of subduing the vicious habits he had contracted.

11. His father was so well pleased with this change, that the following year he divided the produce of a small orchard between him and his brother.

Lesson 3.—*The Pious Sons.*

1. In one of those terrible eruptions of mount Ætna which have often happened, the danger to the inhabitants of the adjacent country was uncommonly great.

2. To avoid immediate destruction from the flames and the melted lava which ran down the sides of the mountain, the people were obliged to retire to a considerable distance.

3. Amidst the hurry and confusion of such a scene, (every one flying and carrying away whatever he deemed most precious,) two brothers, in the height of their solicitude for the preservation of their wealth and goods, suddenly recollected that their father and mother, both very old, were unable to save themselves by flight.

4. Filial tenderness triumphed over every other consideration.

5. "Where," cried the generous youths, "shall we find a more precious treasure than they are who gave us being, and who have cherished and protected us through life?"

6. Having said this, the one took up his father on his shoulders, and the other his mother, and happily made their way through the surrounding smoke and flames.

7. All who were witnesses of this dutiful and affectionate conduct were struck with the highest admiration; and they and their posterity ever after called the path which these good young men took in their retreat "The field of the pious."

Lesson 4.—*Filial Sensibility.*

1. A young gentleman in one of the academies at Paris was remarked for eating nothing but soup and dry bread, and drinking only water.

2. The governor of the institution, attributing this singularity to mistaken devotion, reproved his pupil, and endeavoured to persuade him to alter his resolution.

3. Finding however that his remonstrances were ineffectual, he sent for him again, and observed to him that such conduct was highly unbecoming, and that it was his duty to conform to the rules of the academy.

4. He then endeavoured to learn the reason of his pupil's conduct; but, as the youth could not be prevailed upon to impart the secret, the governor at last threatened to send him back to his family.

5. This menace produced an immediate explanation. "Sir," said the young man, "in my father's house I ate nothing but black bread, and of that very little: here I have good soup and excellent white bread: and though I might, if I chose it, fare luxuriously, I cannot persuade myself to take any thing else, when I reflect on the situation in which I have left my father and mother."

6. The governor was greatly moved by this instance of filial sensibility, and could not refrain from tears.

7. "Your father," said he, "has been in the army; has he no pension?" "No," replied the youth: "he has long been soliciting one; but, for want of money has been obliged to give up the pursuit: and, rather than contract any debts at Versailles, he has chosen a life of wretchedness in the country."

8. "Well," returned the governor, "if the fact be as you have represented it, I promise to procure for your father a pension of two hundred crowns a year. And, since your friends are in such reduced circumstances, take these three gold pieces for your pocket expenses. I will undertake to remit your father the first half year of his pension in advance."

9. "Ah, sir!" replied the youth, "as you have the goodness to propose remitting a sum of money to my father, I entreat you to add to it these three gold pieces. As I have here everything I can wish for, I do not need them; but they would be of great use to my father in the maintenance of his other children."

LESSON 5.—*The secret of being always satisfied.*

1. A certain Italian bishop was remarkable for his happy and contented disposition.

2. He met with much opposition, and encountered many difficulties in his journey through life: but it was observed that he never repined at his condition, nor betrayed the least degree of impatience.

3. An intimate friend of his, who highly admired the virtue which he thought it impossible to imitate, one day asked the prelate if he could communicate the secret of being always satisfied.

4. "Yes," replied the good old man, "I can teach you my secret, and with great facility. It consists in nothing more than in making a right use of my eyes." His friend begged him to explain himself.

5. "Most willingly," returned the bishop. "In whatever state I am, I first of all look up to heaven, and reflect that my principal business here is to get to that blessed abode.

6. "I then look down upon the earth, and call to mind that, when I am dead, I shall occupy but a small space in it.

7. "I then look abroad into the world, and observe what multitudes there are, who in every respect are less fortunate than myself.

8. "Thus I learn where true happiness is placed; where all our cares must end; and how very little reason I have to repine or to complain."

LESSON 6.—*Beneficence its own Reward.*

1. Pigalle, the celebrated artist, was a man of great humanity. Intending on a particular occasion to make a journey from Lyons to Paris, he laid by an hundred crowns to defray his expenses.

2. But a little before the time proposed for his setting out he observed a man walking, with strong marks of deep-felt sorrow in his countenance and deportment.

3. Pigalle, impelled by the feelings of a benevolent heart, accosted him, and inquired with much tenderness whether it was in his power to afford him any relief.

4. The stranger, impressed with the manner of this friendly address, did not hesitate to lay open his distressed situation.

5. "For want of eighty crowns," said he, "I must be dragged this evening to a dungeon, and be separated from a tender wife and a numerous family."

6. "Do you want no more?" exclaimed the humane artist. "Come along with me; I have an hundred crowns in my trunk; and they are all at your service."

7. The next day a friend of Pigalle's met him; and inquired whether it was true that he had, as was publicly reported, very opportunely relieved a poor man and his family from the greatest distress.

8. "Ah, my friend!" said Pigalle, "what a delicious supper did I make last night upon bread and cheese, with a family whose tears marked the gratitude of their hearts, and who blessed me at every mouthful they ate!"

Lesson 7.—*The Compassionate Judge.*

1. The celebrated Charles Anthony Domat was promoted to the office of judge of a provincial court in the south of France, in which he presided with public applause for twenty-four years.

2. One day a poor widow brought a complaint before him against the Baron de Nairac, her landlord, for turning her out of possession of a farm which was her whole dependence.

3. Domat heard the cause; and, finding by the clearest evidence that the woman had ignorantly broken a covenant in the lease, which empowered the landlord to take possession of the farm, he recommended mercy to the baron toward a poor honest tenant who had not wilfully transgressed, or done him any material injury.

4. But, Nairac being inexorable, the judge was obliged to pronounce a sentence of expulsion from the farm, and to order payment of the damages mentioned in the lease, together with the costs of the suit.

5. In delivering this sentence, Domat wiped his eyes, from which tears of compassion flowed plentifully.

6. When the order of seizure, of both her person and effects, was decreed, the poor woman exclaimed, "O just and righteous God! be thou a Father to the widow and her helpless orphans!" and immediately she fainted away.

7. The compassionate judge assisted in raising the distressed woman; and, after inquiring into her character, the number of her children, and other circumstances, generously presented her with eight hundred crowns, the amount of her damages and costs, which he prevailed with the baron to accept as a full recompense; and the widow was restored to her farm.

8. Deeply affected with the generosity of her benefactor, she said to him, "O my lord! when will you demand payment, that I may lay up for that purpose?"

9. "I will ask it," replied Domat, "when my conscience shall tell me that what I have done is wrong."

Lesson 8.—*The Generous Negro.*

1. Joseph Rachel, a respectable negro, resided in the island of Barbadoes. He was a trader, and dealt chiefly in the retail way. In this business he conducted himself so fairly and complaisantly, that, in a town filled with little peddling shops, his doors were thronged with customers.

2. I have often dealt with him, and always found him remarkably honest and obliging. If any one knew not where to obtain an article, Joseph would endeavour to procure it, without making any advantage for himself.

3. In short, his character was so fair, his manners so generous, that the best people showed him a regard which they often deny to men of their own colour, because they are not blessed with the like goodness of heart.

4. In 1756 a fire happened, which burned down great part of the town, and ruined many of the inhabitants. Joseph lived in a quarter that escaped the destruction, and expressed his thankfulness by softening the distresses of his neighbours.

5. Among those who had lost their property by this heavy misfortune, was a man to whose family Joseph, in the early part of his life, owed some obligations.

6. This man, by too great hospitality, an excess very common in the West Indies, had involved himself in difficulties before the fire happened; and, his estate lying in houses, that event entirely ruined him.

7. Amidst the cries of misery and want which excited Joseph's compassion, this man's unfortunate situation claimed particular notice.

8. The generous, the open temper of the sufferer, and the obligation that Joseph owed to his family, were special and powerful motives for acting toward him the part of a friend.

9. Joseph had his bond for sixty pounds sterling. "Unfortunate man!" said he, "this debt shall never come against thee. I sincerely wish thou couldst settle all thy other affairs as easily!"

10. He arose, ordered a large account that the man had with him to be drawn out; and, in a whim that might have called up a smile on the face of Charity, filled his pipe, sat down again, twisted the bond, and lighted his pipe with it.

11. While the account was drawing out, he continued smoking, in a state of mind that a monarch might envy. When it was finished, he went in search of his friend, with the discharged account and the mutilated bond in his hand.

12. On meeting him he presented the papers to him with this address: "Sir, I am sensibly affected with your misfortunes: the obligations I have received from your family give me a relation to every branch of it. I know that your inability to pay what you owe gives you more uneasiness than the loss of your own substance.

13. "That you may not be anxious on my account in particular, accept of this discharge, and the remains of your bond. I am overpaid in the satisfaction that I feel from having done my duty."

LESSON 9.—*Heroism and Generosity of a Peasant.*

1. A great inundation having taken place in the north of Italy, owing to an excessive fall of snow in the Alps, followed by a speedy thaw, the river Adige carried off a bridge near Verona, except the middle part, on which was the house of the toll-gatherer, and who, with his whole family, thus remained imprisoned by the waves, and in momentary expectation of certain destruction.

2. They were discovered from the banks, stretching forth their hands, screaming and imploring succour, while fragments of the only continuing arch were dropping into the impetuous torrent.

3. In this extreme danger a nobleman, the Count of Pulverini, who was a spectator, held out a purse of one hundred sequins, as a reward to any adventurer who would take a boat and save this unhappy family.

4. But the risk was so great of being borne down by the impetuosity of the stream, and being dashed against the fragments of the bridge, or of being crushed by the falling of the heavy stones, that not one of the vast multitude of spectators, had courage enough to attempt such an exploit.

5. A peasant, passing along, was informed of the promised reward. Immediately jumping into the boat, he by amazing strength of oars gained the middle of the river, and brought his boat under the pile, when the whole terrified family safely descended by means of a rope.

6. "Courage," cried he, "now you are safe!" By a still more strenuous effort, and great strength of arm, he brought the boat and family on shore.

7. "Brave fellow!" exclaimed the Count; and, holding out the purse to him, "here is your promised recompense."

8. "I shall never expose my life for money," answered the peasant; "my labour affords a sufficient livelihood for myself, my wife, and children:—give the purse to the poor family who have lost all."

LESSON 10.—*Chinese Generosity.*

1. A few years ago, at a public dinner, the conversation turned on the dishonesty and immorality of the Chinese; and many stories were told in proof of it.

2. Mr. Locke, one of the gentlemen present, observed, "how very unjust it was to stigmatize a whole nation for the vices of a few; that it was true rogues were to be found among the Chinese as well as among other nations.

3. "Still I have known characters among them who were an honour to human nature: for instance, there was Sha-king-qua, the Hong merchant, who behaved in so generous a manner to poor Anderson."

4. The story seemed to be familiar to many of the gentlemen present; but, as others did not know it, Mr. Locke was requested to relate the circumstance, which he did nearly in the following words:—

5. "The Hong merchant had known Mr. Anderson intimately, and had large transactions with him. Mr. Anderson met with heavy losses, became insolvent, and at the time of his failure owed his Chinese friend upwards of 80,000 dollars.

6. "Mr. Anderson wished to come to England, in the hope of being able to retrieve his affairs. He called on the Hong merchant, and in the utmost distress explained his situation, his wishes, and his hopes.

7. "The Chinese listened with anxious attention, and, having heard his story, thus addressed him: 'My friend

Anderson, you have been very unfortunate; you lose all; I very sorry: you go to England: if you more fortunate there, you come back and pay: but that you no forget Chinaman friend, you take this; and, when you look on this, you will remember Shá-king-qua.' In saying these words, he pulled out a valuable gold watch, and gave it to Anderson.

8. "Mr. Anderson took leave of his friend: but he did not live to retrieve his affairs, or to return to China. When the account of his death, and of the distress in which he had left his family, reached Canton, the Hong merchant called on one of the gentlemen of the factory who was about to return to Europe, and addressed him in the following manner:—

9. "'Poor Mr. Anderson dead: I very sorry; he good man; he friend, and he leave two childs: they poor; they have nothing; they childs of my friend: you take this for them; tell them Chinaman friend send it:' and he put into the gentleman's hand a sum of money for Mr. Anderson's children, amounting to several hundred pounds."

10. The story made a strong impression on all present; and Mr. Locke in relating it was so much affected that his eyes filled and his voice thickened.

Lesson 11.—*Virtue in Humble Life.*

1. Perrin lost both his parents before he could articulate their names, and was obliged to go to a charity-school for his education. At the age of fifteen he was hired by a farmer to be a shepherd, in a neighbourhood where Lucetta kept her father's sheep.

2. They often met, and were fond of being together.

After an acquaintance of five years, in which they had many opportunities of becoming thoroughly known to each other, Perrin proposed to Lucetta to ask her father's consent to their marriage: she blushed, and did not refuse her approbation.

3. As she had an errand to the town next day, the opportunity of her absence was chosen for making the proposal. "You wish to marry my daughter," said the old man: "have you a house to cover her, or money to maintain her? Lucetta's fortune is not enough for both. It will not do, Perrin; it will not do."

4. "But," replied Perrin, "I have hands to work. I have laid up twenty crowns of my wages, which will defray the expense of the wedding: I will work harder, and lay up more." "Well," said the old man, "you are young, and may wait a little: get rich, and my daughter is at your service."

5. Perrin waited for Lucetta's return in the evening. "Has my father given you a refusal?" cried Lucetta. "Ah, Lucetta," replied Perrin, "how unhappy am I for being poor! But I have not lost all hopes: my circumstances may change for the better."

6. As they never tired of conversing together, the night approached, and it became dark. Perrin, making a false step, fell on the ground. He found a bag which was heavy. Drawing toward a light in the neighbourhood, he discovered that it was filled with gold.

7. "I thank heaven," cried Perrin, in a transport of joy, "for being favourable to our wishes. This will satisfy your father, and make us happy."

8. In their way to her father's house a thought struck Perrin. "This money is not ours; it belongs to some stranger: and perhaps this moment he is lamenting the

loss of it. Let us go to the vicar for advice; he has always been kind to me."

9. Perrin put the bag into the vicar's hand, saying, that "at first he looked on it as a providential present, to remove the only obstacle to their marriage; but that he now doubted whether he could lawfully retain it."

10. The vicar eyed the young couple with attention: he admired their honesty, which appeared even to surpass their affection. "Perrin," said he, "cherish these sentiments: Heaven will bless you. We will endeavour to find out the owner: he will reward thy honesty: I will add what I can spare. You shall have Lucetta."

11. The bag was advertised in the newspapers, and cried in the neighbouring parishes. Some time having elapsed, and the money not having been demanded, the vicar carried it to Perrin.

12. "These twelve thousand livres bear at present no profit: you may reap the interest at least. Lay them out in such a manner as to ensure the sum itself to the owner, if he should ever appear."

13. A farm was purchased, and the consent of Lucetta's father to the marriage was obtained. Perrin was employed in husbandry, and Lucetta in family affairs. They lived in perfect cordiality, and two children endeared them still more to each other.

Lesson 12.—*Virtue in Humble Life.—(concluded.)*

1. Perrin one evening, returning homeward from his work, saw a chaise overturned with two gentlemen in it. He ran to their assistance, and offered them every accommodation his small house could afford.

2. "This spot," cried one of the gentlemen, "is very

fatal to me. Ten years ago I lost here twelve thousand livres."

3. Perrin listened with attention. "What search made you for them?" said he. "It was not in my power," replied the stranger, "to make any search. I was hurrying to the sea side to embark for the Indies, as the vessel was ready to sail."

4. Next morning Perrin showed to his guests his house, his garden, his cattle, and mentioned the produce of his fields.

5. "All these are your property," said he, addressing the gentleman who had lost the bag: "the money fell into my hands; I purchased this farm with it: the farm is yours. The vicar has an instrument which secures your property, though I had died without seeing you."

6. The stranger read the instrument with emotion: he looked on Perrin, Lucetta, and the children. "Where am I?" cried he, "and what do I hear! What virtue in people of so low a condition! Have you any other land but this farm?"

7. "No," replied Perrin; "but you will have occasion for a tenant, and I hope you will allow me to remain here." "Your honesty deserves a better recompense," answered the stranger.

8. "My success in trade has been great, and I have forgotten my loss. You are well entitled to this little fortune: keep it as your own. What man in the world could have acted more nobly than you have?"

9. Perrin and Lucetta shed tears of affection and joy. "My dear children," said Perrin, "kiss the hand of your benefactor.—Lucetta, this farm now belongs to us, and we can enjoy it without any anxiety or remorse."

10. Thus was honesty rewarded. Let those who desire the reward practise the virtue.

LESSON 13.—*The Noble Basket-maker.*

1. The Germans of rank and fortune were formerly remarkable for the custom of having their sons instructed in some mechanical business, by which they might be habituated to a spirit of industry; secured from the miseries of idleness; and qualified, in case of necessity, to support themselves and their families.

2. A striking proof of the utility of this custom occurs in the following narrative.

3. A young German nobleman of great merit and talents paid his addresses to an accomplished young lady of the Palatinate; and applied to her father for his consent to marry her.

4. The old nobleman, amongst other observations, asked him "how he expected to maintain his daughter."

5. The young man, surprised at such a question, observed, "that his possessions were known to be ample, and as secure as the honours of his family.

6. "All this is very true," replied the father; "but you well know that our country has suffered much from wars and devastation, and that new events of this nature may sweep away all your estate, and render you destitute.

7. "To keep you no longer in suspense, (continued the father, with great politeness and affection,) I have seriously resolved never to marry my daughter to any person, who, whatever may be his honours or property, does not possess some mechanical art, by which he may be able to support her in case of unforeseen events."

8. The young nobleman, deeply affected with his determination, was silent for a few minutes; when recovering himself he declared, "that he believed his happiness so much depended on the proposed union, that no diffi-

culty or submissions consistent with his honour should prevent him from endeavouring to accomplish it."

9. He begged to know whether he might be allowed six months to acquire the knowledge of some manual art.

10. The father, pleased with the young man's resolution and affection for his daughter, consented to the proposal; and pledged his honour that the marriage should take place, if at the expiration of the time limited he should succeed in his undertaking.

11. Animated by the tenderest regard, and by a high sense of the happiness he hoped to enjoy, he went immediately into Flanders, engaged himself to a white twig basket-maker, and applied every power of ingenuity and industry to become skilled in the business.

12. He soon obtained a complete knowledge of the art; and, before the expiration of the time proposed, returned, and brought with him, as specimens of his skill, several baskets adapted to fruit, flowers, and needlework.

13. These were presented to the young lady, and universally admired for the delicacy and perfection of the workmanship.

14. Nothing now remained to prevent the accomplishment of the noble youth's wishes; and the marriage was solemnized, to the satisfaction of all parties.

15. The young couple lived several years in affluence; and seemed by their virtues and moderation to have secured the favours of fortune.

16. But the ravages of war at length extended themselves to the Palatinate. Both the families were driven from their country, and their estates forfeited.

17. And now opens a most interesting scene. The young nobleman commenced his trade of basket-mak-

ing, and by his superior skill in the art soon commanded extensive business.

18. For many years he liberally supported not only his own family but also that of the good old nobleman, his father-in-law; and enjoyed the high satisfaction of contributing by his own industry to the happiness of connexions doubly endeared to him by their misfortunes, and who otherwise would have sunk into the miseries of neglect and indigence, sharpened by the remembrance of better days.

Chapter III.—DIDACTIC PIECES.

Lesson 1.—*On Filial Piety.*

1. From the creatures of God let man learn wisdom, and apply to himself the instruction they give.

2. Go to the desert, my son · observe the young stork of the wilderness; let him speak to thy heart: he beareth on his wings his aged sire; he lodgeth him in safety, and supplieth him with food.

3. The piety of a child is sweeter than the incense of Persia offered to the sun; yea, more delicious than odours wafted from a field of Arabian spices by the western gales.

4. Be grateful to thy father, for he gave thee life; and to thy mother, for she sustained thee.

6. Hear the words of his mouth, for they are spoken for thy good: give ear to his admonition, for it proceedeth from love.

6. He hath watched for thy welfare, he hath toiled for thy ease: do honour therefore to his age, and let not his gray hairs be treated with irreverence.

7. Forget not thy helpless infancy, nor the frowardness of thy youth; and indulge the infirmities of thine aged parents: assist and support them in the decline of life.

8. So shall their hoary heads go down to the grave in peace; and thine own children, in reverence of thine example, shall repay thy piety with filial love.

Lesson 2.—*Love between Brothers and Sisters.*

1. Ye are the children of one father, provided for by his care; and the breast of one mother hath given you suck.

2. Let the bonds of affection therefore unite you, that peace and happiness may dwell in your father's house.

3. And, when ye separate in the world, remember the relation that birleth you to love and unity; and prefer not a stranger to your own blood.

4. If thy brother is in adversity, assist him; if thy sister is in trouble, forsake her not.

5. So shall the fortunes of thy father contribute to the support of his whole race; and his care be continued to you all in your love to each other.

Lesson 3.—*Benevolence.*

1. When thou considerest thy wants, when thou beholdest thy imperfections, acknowledge His goodness, O son of humanity! who honoured thee with reason, endued thee with speech, and placed thee in society, to receive and confer reciprocal helps and mutual obligations.

2. Thy food, thy clothing, thy convenience of habitation, thy protection from injuries, thy enjoyment of

the comforts and the pleasures of life; all these thou owest to the assistance of others, and couldst not enjoy but in the bands of society.

3. It is thy duty therefore to be a friend to mankind, as it is thy interest that man should be friendly to thee.

4. As the rose breatheth sweetness from its own nature, so the heart of a benevolent man produceth good works.

5. He enjoyeth the ease and tranquillity of his own breast, and rejoiceth in the happiness and prosperity of his neighbour.

6. He openeth not his ear unto slander: the faults and the failings of men give pain to his heart.

7. His desire is to do good, and he searcheth out the occasions thereof: in removing the oppressions of another, he relieveth himself.

8. From the largeness of his mind he comprehendeth in his wishes the happiness of all men; and from the generosity of his heart he endeavoureth to promote it.

Lesson 4.—*Pity.*

1. As the blossoms and flowers are strewed upon the earth by the hand of spring: as the kindness of summer produceth in perfection the bounties of harvest; so the smiles of pity shed blessings on the children of misfortune.

2. He who pitieth another recommendeth himself; but he who is without compassion deserveth it not.

3. The butcher relenteth not at the bleating of the lamb; neither is the heart of the cruel moved with distress.

4. But the tears of the compassionate are sweeter than dew-drops falling from roses on the bosom of the earth.

5. Shut not thine ear therefore against the cries of the poor; neither harden thy heart against the calamities of the innocent.

6. When the fatherless fall upon thee; when the widow's heart is sunk, and she imploreth thine assistance with tears of sorrow, Oh pity her affliction, and extend thy hands to those who have none to help them.

7. When thou seest the naked wanderer of the street shivering with cold and destitute of habitation, let bounty open thy heart; let the wings of charity shelter him from death, that thine own soul may live.

Lesson 5.—*Fortitude.*

1. Peril, and misfortune, and want, and pain, and injury, are more or less the lot of every man that cometh into the world.

2. It behoveth thee therefore, O child of calamity! early to fortify thy mind with courage and patience, that thou mayst support with a becoming resolution thine allotted portion of human evil.

3. As the camel beareth labour, and heat, and hunger, and thirst, through deserts of sand, and fainteth not; so the fortitude of a man should sustain him through all perils.

4. A man of a noble spirit disdaineth the malice of fortune: his greatness of soul is not to be cast down.

5. His happiness dependeth not on her smiles, and therefore by her frowns he should not be dismayed.

6. As the rock in the sea he standeth firm, and the dashing of the waves disturbeth him not.

7. He raiseth his head like a tower on a hill, and the arrows of fortune drop at his feet.

8. In the instant of danger the courage of his heart sustaineth him; and the steadiness of his mind beareth him up.

9. He meeteth the evils of life as a man that goeth forth into battle, and returneth with victory in his hand.

10. Under the pressure of misfortunes his calmness alleviates their weight, and his constancy surmounts them.

11. But the dastardly spirit of a timorous man betrayeth him to shame. As a reed is shaken with a breath of air, so the shadow of evil maketh him tremble.

12. In the hour of danger he is embarrassed and confounded; in the day of misfortune he sinketh, and despair overwhelmeth his soul.

LESSON 6.—*Application.*

1. Since the days that are past are gone forever, and those that are to come may not come to thee; it behoveth thee, O man! to employ the present time, without regretting the loss of that which is past, or too much depending on that which is to come.

2. This instant is thine; the next is in the womb of futurity, thou knowest not what it may bring forth.

3. Whatsoever thou resolvest to do, do it quickly; defer not till the evening what the morning may accomplish.

4. Idleness is the parent of want and of pain; but the labour of virtue bringeth forth pleasure.

5. The hand of diligence defeateth want; prosperity and success are the industrious man's attendants.

6. Who is he that hath acquired wealth, that hath risen to power, that hath clothed himself with honour, that is spoken of in the city with praises, and that standeth before the king in his council? Even he that hath

shut out idleness from his house, and hath said unto sloth, Thou art my enemy.

7. He riseth up early, and lieth down late; he exerciseth his mind with contemplation, and his body with action, and preserveth the health of both.

8. The slothful man is a burden to himself: his hours hang heavy on his head; he loitereth about, and knoweth not what he would do.

9. His days pass away like the shadow of a cloud, and he leaveth behind him no mark for remembrance.

LESSON 7.—*Emulation.*

1. If thy soul thirsteth for honour, if thy ear hath any pleasure in the voice of praise, raise thyself from the dust whereof thou art made, and exalt thy aim to something that is praiseworthy.

2. Endeavour to be first in thy calling, whatever it be; neither let any one go before thee in well-doing: nevertheless envy not the merits of another, but improve thy own talents.

3. Scorn also to depress thy competitor by any dishonest or unworthy method: strive to raise thyself above him only by excelling him; so shall thy contest for superiority be crowned with honour, if not with success.

4. By a virtuous emulation the spirit of man is exalted within him: he panteth after fame, and rejoiceth as a racer to run his course.

5. He riseth like the palm-tree in spite of oppression; and as an eagle in the firmament of heaven he soareth aloft, and fixeth his eye upon the glories of the sun.

6. The examples of eminent men are in his visions by night, and his delight is to follow them all the day long.

7. He formeth great designs; he rejoiceth in the ex-

ecution of them; and his name goeth forth to the ends of the world.

8. But the heart of the envious man is gall and bitterness: his tongue spitteth venom; the success of his neighbour breaketh his rest.

9. He sitteth in his cell repining, and the good that happeneth to another is to him an evil.

10. Hatred and malice feed upon his heart, and there is no rest in him.

11. He lieth on the watch and meditateth mischief; but the detestation of man pursueth him; and he is crushed as a spider in his own web.

LESSON 8.—*On the Period and Uses of Human Life.*

1. As the eye of morning to the lark, as the shade of evening to the owl, as honey to the bee, or as the carcase to the vulture; even such is life to the heart of man.

2. Learn to esteem life as it deserves; then art thou near the pinnacle of wisdom.

3. Think not with the fool that nothing is more valuable; nor believe with the pretended wise that thou oughtest to contemn it. Love it, not for itself, but for the good it may render to others.

4. Gold cannot buy it for thee, neither can mines of diamonds purchase back the moment thou hast now lost of it. Employ the succeeding ones in virtue.

5. As the bird is enclosed in the cage before he seeth it, yet teareth not its flesh against its sides; so neither labour thou vainly to run from the state thou art in; but know it is allotted thee, and be content with it.

6. Though its ways are uneven, yet are they not all painful. Accommodate thyself to all: and where there is least appearance of evil suspect the greatest danger.

7. When thy bed is straw thou sleepest in security; but, when thou stretchest thyself on roses, beware of the thorns.

LESSON 9.—*On the Period and Uses of Human Life.* (*concluded.*)

1. Complain not with the fool of the shortness of thy time: remember that with thy days thy cares are shortened.

2. He who gave thee life as a blessing shortened it to make it more so. To what end would longer life have served thee? Wishest thou to have had an opportunity of more vices? As to the good, will not He who limited thy span be satisfied with the fruits of it.

3. Enough hast thou of life, but thou regardest it not; thou art not in want of it. O man! thou art prodigal: thou throwest it lightly away as if thou hadst more than enough; and yet thou repinest that it is not gathered again unto thee!

4. Know that it is not abundance which maketh rich, but economy.

5. The wise continueth to live from his first period; the fool is always beginning.

6. Labour not after riches first, and think thou wilt afterwards enjoy them. He who neglecteth the present moment throweth away all he hath. As the arrow passeth through the heart while the warrior knoweth not that it is coming; so shall his life be taken away before he knoweth that he hath it.

7. As one wave pusheth on another, till both are involved in that behind them; even so succeedeth evil to evil in the life of man: the greater and the present swallow up the less and the past.

8. It is said, Gray hairs are revered, and length of days is honoured. Virtue can add reverence to the bloom of youth; and, without it, age plants more wrinkles in the soul than on the forehead.

9. Be virtuous whilst thou art young; so shall thine age be honoured.

Lesson 10.—*Diversions.*

1. Health, morals, and the improvement of the mind, have oftentimes been injured by improper amusements, and ill behaviour, in the hours set apart for play and relaxation.

2. Let me therefore intreat you, in the first place, to avoid, if possible, everything dangerous in your diversions.

3. An eye is soon lost, or a bone broken: fevers that prove fatal are frequently brought on by excessive heats and want of common prudence.

4. Not that I would have you on this account sit still, while your companions are enjoying themselves; or demean yourself with all the gravity, caution, and sobriety of an old man of sixty.

5. I wish you to be as active, as lively, and as merry, as any of them; but on this, as on every other occasion, fix in your own mind the limits of propriety, and determine never to pass beyond them.

6. In the next place, my dear boy, never let your amusements be corrupted with anything mischievous or vicious.

7. Remember that it is on small occasions, and in unguarded moments, that the natural character betrays itself; and I should have a very indifferent opinion of

a boy who was inclined to vice or mischief in his play, though he behaved with the utmost propriety on other occasions.

8. A disposition to sport we rather expect in youth of your age, and are even pleased with it, while confined within the bounds of innocence; but high spirits and want of reflection, I know, often lead boys into vice and mischief in their diversions.

9. That this may not be the case with you, never let fire-arms, gunpowder, throwing of stones, and the like, have a place in your sports while at school.

10. There are a thousand little mischievous and provoking actions, which are committed occasionally by boys, under the idea of play; and which you have been often witness to, if not concerned in, I make no question. From all these I would have you carefully abstain; because there is always something little, mean, and impudent in them; and these are defects of character to which I wish you to be wholly a stranger.

Lesson 11.—*Respect and Affection due from Pupils to their Tutors.*

1. Quintilian says, that he has included almost all the duty of scholars in this one piece of advice which he gives them; to love those who instruct them, as they love the sciences which they study; and to look upon them as fathers, from whom they derive, not the life of the body, but that instruction which is in a manner the life of the soul.

2. This sentiment of affection and respect disposes them to apply diligently during the time of their studies, and preserves in their minds, during the remainder of

life, a tender gratitude toward their instructors. It seems to include a great part of what is to be expected from them.

3. Docility, which consists in readily receiving instructions and reducing them to practice, is properly the virtue of scholars, as that of masters is to teach well. As it is not sufficient for a labourer to sow the seed, unless the earth, after having opened its bosom to receive it, warms and moistens it: so the whole fruit of instruction depends upon a good correspondence between master and scholars.

4. Gratitude toward those who have faithfully laboured in our education is an essential virtue, and the mark of a good heart. "Of those who have been carefully instructed, who is there," says Cicero, "that is not delighted with the sight and even the remembrance of his preceptors, and the very place where he was educated?" Seneca exhorts young men to preserve always a great respect for their masters, to whose care they are indebted for the amendment of their faults, and for having imbibed sentiments of honour and probity.

5. Their exactness and severity sometimes displease, at an age when we are not in a condition to judge of the obligations we owe them; but, when years have ripened our understanding and judgment, we discern that admonitions, reprimands, and a severe exactness in restraining the passions of an imprudent and inconsiderate age, so far from justifying dislike, demand our esteem and love. Marcus Aurelius, one of the wisest and most illustrious emperors that Rome ever had, thanked Heaven for two things especially:—for having had excellent tutors himself; and for having found the like blessing for his children.

Lesson 12.—*On Forgiveness.*

1. The plainest and the most natural sentiments of equity concur with divine authority to enforce the duty of forgiveness.

2. Let him who has never in his life done wrong be allowed the privilege of remaining inexorable. But let such as are conscious of frailties and crimes consider forgiveness as a debt which they owe to others.

3. Common failings are the strongest lesson of mutual forbearance. Were this virtue unknown among men, order and comfort, peace and repose, would be strangers to human life.

4. If injuries were retaliated, according to the exorbitant measure which passion prescribes, they would excite resentment in return.

5. The injured person would become the injurer; and thus wrongs, retaliation, and fresh injuries, would circulate in endless succession, till the world was rendered a field of blood.

6. Of all the passions which invade the human breast, revenge is the most direful. When allowed to reign with full dominion, it is more than sufficient to poison the few pleasures which remain to man in his present state.

7. How much soever a person may suffer from injustice, he is always in hazard of suffering more from the prosecution of revenge.

8. The violence of an enemy cannot inflict what is equal to the torment he creates to himself, by means of the fierce and desperate passions which he allows to rage in the soul.

9. If we look into the history of mankind, we shall find that, in every age, they who have been respected

as worthy, or admired as great, have been distinguished for this virtue.

10. Revenge dwells in little minds. A noble and magnanimous spirit is always superior to it. It suffers not from the injuries of men those severe shocks which others feel.

11. Collected within itself, it stands unmoved by their impotent assaults; and, with generous pity rather than with anger, looks down on their unworthy conduct.

12. It has been truly said that, as soon as the greatest man on earth commits an injury, a good man can make himself greater than he, by forgiving it.

LESSON 13.—*On Gratitude.*

1. There is not a more pleasing exercise of the mind than gratitude.

2. It is accompanied with so great inward satisfaction, that the duty is sufficiently rewarded by the performance.

3. It is not, like the practice of many other virtues, difficult and painful; but attended with so much pleasure that, were there no positive command which enjoined it, nor any recompense laid up for it hereafter, a generous mind would indulge in it for the natural gratification which it affords.

4. If gratitude is due from man to man, how much more is it from man to his Maker?

5. The Supreme Being confers upon us not only those bounties which proceed more immediately from his hand, but even those benefits which are conveyed to us by others.

6. Every blessing we enjoy, by what means soever it may be obtained, is the gift of Him who is the great Author of good and the Father of mercies.

7. If gratitude, when exerted toward one another, naturally produces a very pleasing sensation in the mind of a grateful man, it exalts the soul into rapture when it is employed on this great object of gratitude; on this beneficent Being, who has given us everything we already possess, and from whom we expect everything we yet hope for.

LESSON 14.—*Ingratitude to our Supreme Benefactor is highly culpable.*

1. Artabanes was distinguished with peculiar favour by a wise, powerful, and good prince.

2. A magnificent palace, surrounded with a delightful garden, was provided for his residence.

3. He partook of all the luxuries of his sovereign's table, was invested with extensive authority, and admitted to the honour of a free intercourse with his gracious master.

4. But Artabanes was insensible of the advantages which he enjoyed: his heart glowed not with gratitude and respect; he avoided the society of his benefactor, and abused his bounty.

5. "I detest such a character!" said Alexis, with generous indignation.

6. "It is your own picture which I have drawn," replied Euphronius. "The great Potentate of heaven and earth has placed you in a world, which displays the highest beauty, order, and magnificence, and which abounds with every means of convenience, enjoyment, and happiness.

7. "He has furnished you with such powers of body and mind, as give you dominion over the fishes of the sea, the fowls of the air, and the beasts of the field.

8. "He has invited you to hold communion with him, and to exalt your own nature by the love and imitation of his divine perfections.

9. "Yet have your eyes wandered with brutal gaze over the fair creation, unconscious of the mighty hand from which it sprung.

10. "You have rioted in the profusion of nature, without suitable emotions of gratitude to the sovereign Dispenser of all good: and you have too often slighted the glorious converse, and forgotten the presence of that omnipotent Being, who fills all space, and exists through all eternity."

LESSON 15.—*Speculation and Practice.*

1. A certain astronomer was contemplating the moon through his telescope, and tracing the extent of her seas, the height of her mountains, and the number of habitable territories which she contains.

2. "Let him spy what he pleases," said a clown to his companions, "he is not nearer to the moon than we are."

3. Shall the same observation be made of you, Alexis? Do you surpass others in learning, and yet in goodness remain upon a level with the uninstructed vulgar?

4. Have you so long gazed at the temple of virtue, without advancing one step toward it? Are you smitten with moral beauty, yet regardless of its attainment? Are you a philosopher in theory, but a novice in practice?

5. The partiality of a father inclines me to hope that the reverse is true.

6. I flatter myself that, by having learned to think, you will be qualified to act; and that the rectitude of

your conduct will be adequate to your improvement in knowledge.

7. May that wisdom which is justified in her works be your guide through life.

8. And may you enjoy all the felicity which flows from a cultivated understanding, pious and well regulated affections, and extensive benevolence.

9. In these consists that sovereign good, which ancient sages so much extol, which reason recommends, religion authorises, and God approves.

Chapter IV.—DESCRIPTIVE PIECES.

Lesson 1.—*The Covering of different Animals.*

1. The covering of animals is, both for its variety and its suitableness to their several natures, as much to be admired as any part of their structure.

2. There are bristles, hair, wool, fur, feathers, quills, prickles, scales; yet in this diversity of both material and form, we cannot change one animal's coat for another, without evidently changing it for the worse: taking care however to remark, that these coverings are intended for protection as well as for warmth.

3. Man alone can clothe himself; and this is one of the properties which render him an animal of all climates and of all seasons. He can adapt the warmth or lightness of his covering to the temperature of his habitation.

4. What art, however, does for men, nature has in many instances done for those animals which are incapable of art.

5. Their clothing, of its own accord, changes with their necessities. This is particularly the case with that large tribe of quadrupeds which are covered with furs. Every dealer in hare-skins and rabbit-skins knows how much the fur is thickened by the approach of winter.

6. It seems to be a part of the same design of the Power who created all things, that wool in hot countries, most happily for the animal's ease, passes into hair; while, on the contrary, hair, in the dogs of the polar regions, is turned into wool.

7. To which also may be referred what naturalists have remarked, that bears, wolves, foxes, and hares, which do not take the water, have the fur much thicker on the back than the belly; whereas in the beaver it is thickest upon the belly; as also are the feathers in water-fowl. We see the use of all this; but we know no other cause for it, than that God has so willed it, for the benefit of his creatures.

8. The covering of birds cannot escape the most vulgar observation; its lightness, its smoothness, its warmth, its singular beauty.

9. The disposition of the feathers all inclined backward, the down about their stem, the overlapping of their tips, their different configuration in different parts, not to mention the variety of their colours, constitute a vestment for the body, so beautiful, and so appropriate to the life which the animal is to lead, that I think we should have had no conception of anything equally perfect, if we had never seen it; nor can we now imagine anything more so.

Lesson 2.—*The Elephant.*

1. The stupendous size, strength, and sagacity of the elephant, have in all ages rendered this animal the admiration of mankind.

2. Though possessed of power superior to every other quadruped, it is guiltless of unprovoked violence, and wanders about the woods of Asia and Africa in a state of majestic mildness. Large troops assemble together, and live in a kind of society, feeding only on vegetables.

3. The elephant is generally of a deep ash-coloured brown, or nearly blackish; but in some parts of India a few of a white colour are to be found.

4. It is undoubtedly the largest of terrestrial animals, arriving at the height of twelve feet, though the more general height seems to be from nine to ten feet.

5. They are commonly found in the midst of shady woods, being as averse to extreme heat as to cold; delight in cool spots near rivers, frequently bathe themselves in the water, and swim with great ease.

6. The trunk of the elephant may justly be considered as one of the miracles of nature; being at once the organ of respiration, and the instrument by which the animal supplies itself with food, conveying whatever it eats into the mouth by its assistance. By this instrument also it drinks; first sucking up the water by the trunk, and then pouring it into the mouth.

7. This wonderful organ is composed of a vast number of flexible rings; and consists of a double tube, with a somewhat flattened circular tip, finished with a projecting point, or fleshy moveable hook, of extreme sensibility, with which it can pick up the smallest object at pleasure.

8. The trunk, being flexible in all directions, per-

forms the office of a hand and arm. On its under surface it is somewhat flattened, and is circularly formed on the upper. At the end of the trunk are situated the nostrils. In a state of nature elephants use their tusks for tearing up trees, and their trunk for breaking the branches.

9. They are possessed of a greater degree of intelligence than most other quadrupeds; and, when in a state of domestication, they may be taught to perform many operations requiring not only strength but skill.

10. It appears, from the most authentic information, that they are highly attached to those who have them under their care; that they are grateful for attention shown them; and mindful of any injury received, which they generally find some means of retaliating.

11. The celebrated story of the tailor of Delhi is a remarkable example of the elephant's sagacity! In that city an elephant, passing along the streets, put his trunk into a tailor's shop, where several people were at work. One of them pricked the end of the trunk with his needle: the elephant passed on; but in the first dirty puddle filled his trunk with water, and returning, squirted every drop among the people who had offended him, and spoiled the clothes on which they were at work.

LESSON 3.—*The Camel.*

1. Of all animals that man has subjugated to his dominion, the camel is the most abject slave: with incredible patience and submission he traverses the burning sands of Africa and Arabia, carrying burdens of amazing weight.

2. The Arabs consider the camel as a gift sent from heaven, a sacred animal, without whose assistance they could neither subsist, traffic, nor travel.

3. The milk of the camel is their common food. They also eat its flesh; and its hair supplies them with materials for raiment.

4. In possession of their camels, the Arabs want nothing, and have nothing to fear. In one day they can perform a journey of one hundred and fifty miles into the desert, which cuts off every approach from their enemies.

5. By the assistance of his camel, an Arab surmounts all the difficulties of a country which is neither covered with verdure nor supplied with water.

6. The tough and spongy feet of the camel are peculiarly adapted to a hot climate; for in the most fatiguing journeys they are never found to crack. The sand seems indeed their element; for as soon as they quit it and touch the mud, they can scarcely keep upright.

7. Their great power of abstaining from drinking enables them to pass unwatered tracts of country for seven or eight days, without requiring any liquid. They can discover water by their scent at half a league's distance; and after a long abstinence will hasten toward it long before their drivers perceive where it lies.

8. Their patience under hunger is such, that they will travel many days, fed only with a few dates, or some small balls of barley-meal, or on the miserable thorny plants which they meet with in the deserts.

9. A large camel will traverse the deserts with a load of a thousand or twelve hundred pounds. When about to be loaded, at the command of the conductor the animals instantly bend their knees.

10. If overburdened, they give repeated blows with their heads to the person who oppresses them, and sometimes utter lamentable cries.

Lesson 4.—*The Rhinoceros.*

1. The rhinoceros is the most powerful animal next to the elephant: it is nearly of the same bulk, being about twelve feet long, between six and seven feet high, and being smaller only in its legs.

2. Its head is furnished with a horn growing from the snout; its upper lip is long, pointed, and very pliable, serving to collect its food in the mouth; its skin is naked, lying upon the body in folds.

3. Two of these are remarkable, one above the shoulders, the other over the rump: the skin is of a brown colour, and will turn a sharp-edged weapon.

4. The horn is sometimes more than three feet long, and grows from the solid bone: thus armed with a weapon that keeps off even the elephant and the tiger, and defended with a thick horny hide that repels the claws of the lion, the rhinoceros has nothing to fear from any animal.

5. It is a native of the deserts of Asia and Africa; and is generally found in the extensive forests inhabited by the elephant and the lion.

6. It lives chiefly on vegetable food; it is therefore of a peaceable and harmless disposition: but it is not deficient in courage, disdaining to fly when attacked by another animal. It appears to rest contented with the consciousness of security, though it is in every way provided for engaging in combats.

7. It is particularly fond of the prickly branches of trees, and is seen to feed upon such thorny shrubs as would be dangerous for other animals either to gather or to swallow.

8. These animals, when tamed, are sometimes led into the field of battle; but they are unmanageable and

restive, and probably more dangerous to those who employ them, than to those against whom they are brought to engage.

9. The method of taking them is chiefly by watching them when they are in some marshy place, where they are accustomed to sleep and wallow like hogs. If there happens to be an old and young one together, the former is shot with fire-arms, for no other instrument that can be employed will enter its hide. When the old one is destroyed, the young one is taken and tamed.

10. They are occasionally taken in pit-falls, when going from the forest to the river side: these snares are laid in the paths which they most commonly frequent, and covered with green branches.

11. A variety of the rhinoceros is said to be found in Africa: it is described as having a double horn, one growing above the other; thus constituting one of the strongest and most dangerous weapons which nature has bestowed upon any of the animal creation.

12. The horn is perfectly solid, formed of the hardest bony substance, and grows from the upper jawbone by so strong a protuberance, as in appearance to make but one part with the rest of the bone.

Lesson 5.—*The Hippopotamus.*

1. In point of size, this animal may be ranked with the rhinoceros and elephant; but it is remarkable for the comparative shortness of its legs, and the magnitude of its head.

2. It appears, from the accounts which have been given of it, that it is most frequently found on the banks of the river Nile, in the waters of which it mostly resides.

3. This terrible creature is said to measure more than seventeen feet in length, and seven in height: the head is nearly four feet long, and more than nine in circumference.

4. The hide is of extraordinary thickness, and, though not capable of repelling a musket shot, is impenetrable to the blow of a sabre: the body is covered over with a few whitish hairs.

5. Though it seems well furnished for engaging with other animals, it is but ill-disposed to employ its prodigious strength against an equal enemy; but, remaining usually in the great rivers and lakes of Africa, it passes an indolent life, and is seldom active except in quest of food.

6. Three or four of them are, on these occasions, seen in company with each other, forming a kind of line at the bottom of a river, and devouring the fish which the violence of the stream carries down.

7. They pursue their prey in the water with considerable quickness and industry: they swim with great force, and are enabled to remain at the bottom, without being obliged to rise to the surface, during an interval of thirty or forty minutes together.

8. When however, as occasionally takes place, the hippopotamus is unable to meet with a sufficiently abundant supply of fish, it comes on land, where it is an awkward and unwieldy stranger, moving but slowly, and sinking at every step into the marshy ground.

9. But it is sometimes forced by extreme hunger up into the higher parts of the country, where it commits terrible devastations among the plantations of the helpless inhabitants, against whose attacks its stony hide is completely fortified.

10. As it is very timorous upon land, they generally succeed in their endeavours to frighten it away; and the means to which they have recourse for this purpose consist in kindling large fires, and making a great noise with drums.

11. But violence is in most instances unsuccessful; for, if they happen to wound, or irritate it too closely, it becomes formidable to all that oppose it: it overturns whatever it meets, and calls forth all its powers, which till then had lain in a dormant state.

12. In its favourite element, it possesses the same inoffensive disposition which characterizes it upon land: when unmolested, it is never observed to attack the boats which pass up and down the river; but, should its repose in any manner be disturbed, there is much danger of its sinking them in an instant.

13. If the hippopotamus be attacked while ashore, and finds itself incapable of vengeance, from the swiftness of its enemy, it immediately returns to the river, and plunges head foremost into the water.

14. The female always comes ashore to bring forth her young, and is supposed to produce not more than one at a time: at this period she is particularly timid, and is continually in apprehension of some land enemy; so that, whenever she hears the slightest noise, she throws herself into the water, and is quickly followed by her young one, which leaps into the river with equal agility.

Lesson 6.—*The Camelopard.*

1. This animal, which is of the most curious conformation and extraordinary stature, is an inhabitant of the deserts of Africa.

2. It exhibits somewhat of the slender shape of the deer, but is destitute of its symmetry, and its easy power of motion: this resemblance is most strikingly to be observed in the animal's head, which, like that of the deer, is provided with two round horns of about a foot in length; and also in its legs and feet, except with the extraordinary difference that the camelopard's fore legs are nearly twice as long as its hinder ones.

3. It has been affirmed that these creatures are sometimes found so tall, that a man could with ease ride on a middle-sized horse under their belly without stooping: for some of them have been seen to measure eighteen feet in height, and ten from the ground to the top of the shoulders; so that, allowing three feet for the depth of the body, a distance of seven remains between the under part of the belly and the ground.

4. But the hinder part of the body declines considerably; so much indeed that, when the animal appears standing quiet, it has a very peculiar appearance; and, when it is seen running, its motion, though swift, appears awkward and rather laborious.

5. This has been assigned as a reason why the animal seeks refuge in the most internal regions of Africa, and is consequently so seldom met with.

6. Neither from its disposition nor its formation does it appear suited for a state of natural hostility; but, on the contrary, its horns are blunt, and even knotted at their extremities: its teeth are made for vegetable pasture only: it is inoffensive and timid; and rather avoids than encounters the slightest enemy, notwithstanding it is of so amazing a size.

7. Its skin is beautifully speckled with brown spots upon a white ground: it feeds on nothing but vegetables;

and, when grazing, has been said to spread its fore legs very wide, so as to be enabled to reach its pasture with its head: but this is not a correct statement. Generally, it browses on the leaves and young shoots of trees.

8. We are informed that its motion differs from that of other animals, in the circumstance of its moving two legs on the same side at the same time; while quadrupeds in general move a fore and a hind foot forward on each side in taking every step.

9. It frequently lies down with its belly to the earth, and resembles the camel, in having a hard substance upon its breast, to defend it from injury when in a state of repose.

10. The camelopard has been but seldom seen in Europe; it was however well known to the ancients. Indeed, when ancient Rome was in its splendour, no fewer than ten were exhibited at the same time upon the theatre. For, at that period, it was the barbarous pleasure of the people to see the different fights of the most extraordinary animals with each other: they were all let loose upon each other promiscuously, and were allowed to inflict indiscriminate destruction.

Lesson 7.—*The Hyena.*

1. It would be difficult to convey a good idea of the hyena's figure and fierceness: more savage and untameable than any other quadruped, it seems to be continually in a state of rage and savageness, for ever growling, except when it is receiving its food.

2. Its eyes then glisten, the bristles of its back stand upright, its head hangs down, and its teeth come into view; all which gives it the most frightful appearance, particularly when heightened by a dreadful growl.

3. It appears indeed to be the most untractable, and for its size the most terrible, of all animals. Nor does its courage fall short of its fierceness: it defends itself against the largest animals, and seldom fails to conquer those of its own size.

4. The manner of holding its head is remarkable, somewhat like a dog pursuing the scent, with the nose near the ground.

5. It leads a solitary life, and is found chiefly in the most uncultivated parts of the hot countries of which it is a native. It lives in the caverns of mountains, in the clefts of rocks, or in dens that it has formed for itself under the earth.

6. Though taken extremely young it cannot be tamed: like the wolf, it lives by depredation, but it is more courageous and strong. Occasionally it attacks man, carries off cattle, and ravages the flock with insatiable rapacity.

7. Its eyes shine by night, and it appears highly probable that it sees better by night than by day, when the light is too powerful for its eyes.

8. Its hair is of a dirty grayish colour, marked with black, disposed in waves down its body.

9. When it is first pursued, and obliged to run, it has the singular peculiarity of appearing lame for a considerable distance.

10. This is sometimes in so considerable a degree, as to make it be supposed that one of its hind legs has been broken; however, after running for some time the lameness goes off, and it escapes with great ease and celerity.

Lesson 8.—*The Porcupine.*

1. The porcupine appears like a mass of misshapen flesh, covered with quills of about twelve inches in length: each quill is thickest in the middle, and becomes gradually pointed at both extremities. They are fixed into the animal's skin, in the same way as feathers are observed to grow upon birds.

2. All the quills commonly slope backwards; but, when the animal is enraged, they rise, and stand with their points in all directions.

3. This creature appears to be furnished with its formidable provision of arms, more for the purpose of defending itself than for annoying an adversary.

4. It seldom begins any fight; but, when attacked by the bolder animals, it only points its quills so as to keep them always turned toward its enemy.

5. Thus it is completely protected; and, when the quills are raised upright, the lion himself is not bold enough to make an attack on it.

6. Between the porcupine and the serpent there exists such an enmity, that they never meet without a serious battle: the porcupine is said to roll itself upon the serpent, and in that manner to make an end of it.

7. This animal is also known to be very hurtful to gardens; and, where it enters, does a great deal of mischief.

8. It never attempts to bite, or in any way to attack its pursuers: if hunted, it instantly climbs up a tree, and continues there, till it has wearied out the patience of its adversary.

9. Its escape is not so easily effected from the American hunter, who eagerly pursues it, in order to make embroidery of its quills, and to eat its flesh.

Lesson 9.—*The Opossum.*

1. One of the most remarkable animals of America is the opossum, a creature of the size of a small cat, with clear, lively, and bright eyes; and, in the general appearance of its head, resembling the fox.

2. Its ears and tail have been considered to be somewhat like those of a rat: but what is most worthy of notice, and distinguishes this class of animals from others in a most extraordinary manner, is the extremely peculiar conformation of its belly, as it is found to have a large pouch, serving as a receptacle, into which the young creep, and remain in a state of security.

3. The female possesses the power of opening and shutting this bag, in which the young are found as soon as they are born.

4. Travellers are not agreed in their accounts of the time, during which these animals continue in the pouch: some assure us that they remain there for several weeks; others mention a shorter period.

5. At this time there is no difficulty in examining and opening the bag which contains them; and the young may be counted and inspected without much trouble; for they always make it their retreat when they want to suck or sleep, or chance to be pursued by an enemy.

6. When on the ground, the opossum is a slow, helpless animal: its fore feet are ill calculated for running swiftly; but, to obviate this disadvantage, it climbs trees with great facility and expedition.

7. It lives chiefly on birds, and frequently hangs by its long and muscular tail for hours together, with its head downwards; and thus continues to watch for its prey.

8. In this manner it drops down upon and quickly

devours any smaller animal that happens to pass underneath, and which it is able to overpower: it appears to live on vegetables also occasionally.

9. The opossum also swings itself from one tree to another by means of its tail, thus frequently providing for its safety, and procuring insects for its nourishment.

10. It may be tamed without much difficulty: but, beside its stupidity, it is objectionable on account of its strong smell, which, though pleasant in moderate quantities, becomes disagreeable when copiously supplied.

Lesson 10.—*The Kangaroo.*

1. This animal is nearly allied to the opossum, in having a pouch for the security of its young; but differs from the opossum in some particulars connected with its form and mode of life.

2. The teeth are dissimilar, in both number and shape; the fore legs also of the kangaroo are remarkable for their shortness, and the hind legs are equally so on account of their length.

3. The kangaroo, first observed by Captain Cook in New Holland, is described as being in size at least equal to a full grown sheep: but the head and neck are very small, while the lower parts gradually dilate to a larger size. The head has been supposed to be like that of the deer, having a mild and placid aspect; the ears are moderately large, and upright; the eyes large, and the mouth rather small. The general colour is a fine pale brown, a little whiter underneath.

4. The pace of this animal consists in vast springs or leaps, which are said sometimes to exceed nine feet in height, to be nearly twenty in length, and to be repeated very quickly.

5. In this way the creature, by the greater length of the hind legs than of the fore legs, must surpass most other quadrupeds in swiftness and agility.

6. In a state of rest it sits upright on the whole length of the hind feet, supporting itself on the base of the tail: this latter part is said to be occasionally used as a weapon of defence, and to be of such strength as to be able to break the leg of a man at a single blow.

7. In its ordinary walk, it uses its tail much more than its fore legs, pressing it flat to the ground, and raising its body on it, while it advances its hind legs.

8. The young ones, when first brought forth, are very small, scarcely exceeding an inch in length and twenty grains in weight: in the earlier periods of their growth they are always found within the bag of the mother, now and then coming out for exercise or amusement, till they become able to go alone.

9. They live entirely on vegetables, and under ground, and in their natural state appear to be more accustomed to the night than the day.

10. The flesh has somewhat the flavour of mutton, but is said to be rather coarse: the animal, upon the whole, has an extremely elegant appearance.

11. In their wild state they feed in companies of thirty or forty at a time; and it is affirmed that one of them is generally stationed at a distance from the others, as if keeping guard against any sudden surprise.

Lesson 11.—*The Fox.*

1. The fox has always been famous for his cunning and his arts, and he partly merits his reputation.

2. Without attempting to oppose either the dogs or the shepherds, without attacking the flock or alarming

the village, he finds an easier way to subsist, and gains by his address what he cannot effect by his strength or courage.

3. Patient and prudent, he waits the opportunity of depredation, and varies his conduct with every occasion.

4. He generally keeps his kennel at the edge of the wood, and yet within an easy journey of some neighbouring cottage.

5. There he listens to the crowing of the cock and the cackling of the domestic fowls.

6. He scents them at a distance; he spies his opportunity, conceals his approaches, creeps slyly along, makes the attack, and seldom returns without his booty.

7. If he is able to get into the yard, he begins by levelling all the poultry without remorse; and, carrying off a part of the spoil, hides it at some convenient distance, and returns to take away the rest.

8. Taking off another fowl in the same manner, he hides that also, but not in the same place; and this he practises for several times together, until the approach of day, or the noise of the domestics, gives him warning to retire.

9. The same arts are practised when he finds birds entangled in springs laid for them by the fowler; the fox takes care to be beforehand, very expertly takes the bird out of the snare, hides it for three or four days, and knows very exactly when and where to return to avail himself of the hidden treasure.

10. He is equally alert in seizing the young hares and rabbits, before they have strength enough to escape him; and, when the old ones are wounded and fatigued, he is sure to come upon them in their moments of distress, and to show them no mercy.

11. In the same manner he finds out birds' nests, seizes the partridge and the quail while sitting, and destroys a large quantity of game. In short, nothing that can be eaten seems to come amiss to him; he devours rats, mice, serpents, toads, and lizards.

12. He will, when urged by hunger, eat vegetables and insects; and those that live near the sea-coast will, for want of other food, eat crabs, shrimps, and shell-fish.

13. The hedgehog in vain rolls itself up into a ball to oppose him; this determined glutton teases it until it is obliged to appear uncovered, and then he devours it.

14. The wasp and the wild bee are attacked with equal success.

15. Although at first they fly out upon their invader, and actually oblige him to retire, this is but for a few minutes, until he has rolled himself upon the ground, and thus crushed such as stick to his skin; he then returns to the charge, and at last, by perseverance, obliges them to abandon their combs; which he greedily devours, both wax and honey.

Lesson 12.—*The Seal.*

1. Speaking generally, the seal may be said in some respects to resemble quadrupeds, and in other particulars to be like fish: its whole body is covered with a thick shining hair, which appears as if rubbed over with oil, giving it the aspect of a quadruped; but its fore feet are like fins, and its tail bears a great likeness to that of a fish.

2. The creature is considered as remarkable, on account of the magnitude of its brain, which, compared in size with the rest of its body, is very considerable in proportion to that of other animals.

3. The usual habitation of the seal is the water, and its ordinary food consists of fish. Though not equally cunning with some animals which live entirely on the land, it is far superior to the mute inhabitants of the waters.

4. It is unable to remain always under water, like fish, but may be drowned like any common quadruped. On land, it drags itself forward entirely by its fore feet; but so swiftly, that a man running is unable to overtake it.

5. Wherever the seal is observed to frequent, numbers of them are generally seen together. It is on the icy shores of cold climates, where the fish are found in great numbers, that these animals are met with, like flocks of sheep, playing on the rocks, and suckling their young.

6. In fine weather, they commonly employ their time in fishing; but, during storms, are seen by thousands sporting along the shore.

7. They are the only quadrupeds which change their habitation, like birds of passage, from one country to another. Their course does not appear to be exactly known; it is only observed that, when they leave the coasts to go upon their expedition, they are all extremely fat; but, on their return, they are become excessively lean.

8. Not more than three or four are brought forth by the female at one time: they are particularly docile; they understand the mother's voice among the numerous bleatings of the other old ones; they are perfectly obedient to her call, and always assist each other in time of danger.

9. The seal is hunted for the sake of the oil which his fat contains; and for his skin, which, when dressed, is very useful in covering trunks, and for many other purposes.

LESSON 18.—*The Leopard and Hunting Leopard.*

1. The general length of the leopard is four feet from the nose to the root of the tail; and its tail measures two feet.

2. It is of a lively yellow colour, marked on the back and sides with small spots, disposed in circles, and placed pretty closely together: its face and legs are marked with single spots: its breast and belly are covered with longer hairs than the rest of its body, of a whitish colour: the spots on its tail are large and oblong.

3. It inhabits Senegal and Guinea, and spares neither man nor beast. When the beasts of chase fail, the leopards descend in crowds from the interior parts of Africa, and make havock among the numerous herds that cover the rich meadows of Lower Guinea: they tear their prey in pieces with both claws and teeth; and, though perpetually devouring, they are always thin.

4. The negroes take them in pitfalls, covered at the top with slight hurdles, on which is placed some flesh as a bait: when they have killed one, they feast on its flesh.

5. The hunting leopard is of the size of a large greyhound, of a long make, and has long legs and a narrow chest: it has a small head: its eyes are of a pale orange; the end of its nose black: a dusky line runs from each corner of the mouth to the corner of each eye: its ears are short: its face, chin, and throat, are of a pale yellowish brown: the face is slightly spotted: the body is of a light tawny brown, marked with numbers of small round black spots, not in circles, but each distinct.

6. It inhabits India, and is tamed and trained for the chase of antelopes: it is carried in a small kind of waggon, chained and hoodwinked till it approaches the herd.

7. When first unchained, it does not immediately make its attempt, but winds along the ground, stopping

and concealing itself till it gets a proper advantage; then darts on the animals with surprising swiftness, and overtakes them by the rapidity of its bounds: but, if it does not succeed in its first efforts, consisting of five or six amazing leaps, it misses its prey: losing its breath, and finding itself unequal in speed, it stands still, gives up the point for that time, and readily returns to its master.

8. This species is called, in India, Chitta Bagh: it is used for the taking of jackals, as well as other animals.

Lesson 14.—*The Dog.*

1. The dog, independently of his beauty, vivacity, strength, and swiftness, has all the interior qualities which can attract the regard of man.

2. The tame dog comes to lay at his master's feet his courage, strength, and talents, and waits his orders to use them: he consults, interrogates, and beseeches; the glance of his eye is sufficient; he understands the signs of his will. Without the vices of man, he has fidelity and constancy in his affections: no ambition, no interest, no desire of revenge, no fear but that of displeasing him, he is all zeal, all warmth, and all obedience: more sensible to the remembrance of benefits than wrongs, he licks the hand which inflicts pain on him; he opposes punishment only by his cries, and at length entirely disarms anger by his patience and submission.

3. More docile and flexible than any other animal, the dog soon conforms himself to the motions, manners, and habits of those who command him.

4. When the care of the house is intrusted to him during the night, he becomes even ferocious: he watches, he walks his rounds, he scents strangers afar off; and, if they happen to stop, or attempt to break in, he flies to

oppose them, and, by reiterated barkings, efforts, and cries of passion, he gives the alarm.

5. As furious against men of prey as against devouring animals, he flies upon, wounds, and takes from them what they were endeavouring to steal; but, content with having conquered, he rests himself on the spoil, will not touch it even to satisfy his appetite, and gives an example at once of courage, temperance, and fidelity.

6. This species of animal is of the greatest importance in the order of nature: without the assistance of the dog, how could man have been able to discover, hunt, and destroy, wild and obnoxious animals?

7. That man might keep himself in safety, and render himself master of the living universe, it was necessary to make himself friends among animals, in order to oppose them to others. The first art, then, of mankind was the education of dogs; and the fruit of this art was the conquest and peaceable possession of the earth.

8. The dog, faithful to man, will always preserve a portion of empire, and a degree of superiority over other animals; he commands them, and reigns himself at the head of a flock, where he makes himself better understood than the voice of the shepherd: safety, order, and discipline are the fruits of his vigilance and activity.

9. The sheep are a people who are submissive to him, whom he conducts and protects, and against whom he never employs force, unless it be to maintain peace.

10. The dog may be said to be the only animal whose fidelity to man can be put to the proof; the only one which perceives the approach of an unknown person; the only one which always knows his master and his friends; the only one which understands his own name, and answers to the domestic call; almost the only one

which, when he has lost his master and cannot find him, calls him by his lamentation; the only one which, in a long journey, a journey that perhaps he has been but once, will, if lost or taken from his home, remember the way, and find the road back to his owner: the only one, in short, whose talents are evident, and who is susceptible of every good impression.

LESSON 15.—*Sagacity displayed in the Habitations of Beavers.*

1. The American beavers are the most sagacious and industrious of all animals, and erect edifices superior in contrivance to those of the savage human natives of their wilds.

2. In order to form a habitation, they select a level piece of ground, with a small rivulet running through it. To effect their works, a community of two or three hundred assemble; and every individual of this community bears his share in the laborious preparation.

3. The first object is to form a dam: to do this it is necessary that they should stop the stream, and of course that they should know in which direction it runs. This seems a very wonderful exertion of intellect; for they always do it in the most favourable place for their purpose, and never begin at a wrong part.

4. They drive stakes, five or six feet long, into the ground, in different rows, and interweave them with branches of trees; filling them up with clay, stones, and sand, which they ram so firmly down that, though the dams are frequently a hundred feet long, a man may walk over them with the greatest safety.

5. The houses which these wise animals build are erected upon piles in the water, thus connected by means

of the dam; and are of either a circular or oval shape, with arched tops, on the outside resembling a dome, and in the inside having the shape of an oven.

6. These houses are constructed with the utmost ingenuity, of earth, stones, and sticks, cemented together, and plastered in the inside with surprising neatness.

7. The walls are about two feet thick, and the floors so much higher than the surface of the water as always to prevent them from being flooded.—Some of the houses have only one floor, others have three.

8. The number of beavers in each house is from two to thirty. These sleep on the floor, which is strewed with leaves and moss; and each individual is said to have its own place.

9. When they form a new settlement, they begin to build their houses in the summer; and it costs them a whole season to finish the work, and lay in their winter provisions, consisting principally of bark, and the tender branches of trees cut into certain lengths, and piled in heaps under the water.

10. The houses have each one opening, which is under the water, and always below the thickness of the ice; by which means they are secured from the effects of frost.

11. The beavers seldom quit their residence, unless they are disturbed, or their provisions fail. They frequently erect a new house annually; but sometimes merely repair their old one. It often happens that they build a new house so close to the old, that they cut a communication from one to the other.

12. During the summer, they forsake their houses, and ramble about from place to place; sleeping under the covert of bushes, near the water side. On the least noise they betake themselves to the water for security;

and they have centinels, who by a certain cry give notice of the approach of danger.

Lesson 16.—*The Ichneumon.*

1. In the kingdom of Egypt, where the ichneumon is chiefly bred, it is kept for the same purpose that cats are with us, and is even more expert in catching mice than they.

2. It is one of the boldest and most useful animals of its kind: with all the strength of the cat it combines more agility and a fiercer nature.

3. It attacks every animal to which it is superior; pursues indiscriminately rats, mice, birds, serpents, and lizards; and preys on flesh of all kinds.

4. Neither the force of the dog nor the insidious malice of the cat intimidates it; it is neither affected by the poison of the viper nor the claws of the vulture.

5. But, by discovering and destroying the eggs of the crocodile, it renders the most essential services to its keepers: it also kills the young ones, which have not yet been able to go into the water.

6. When wild, this animal generally resides along the banks of rivers; but, when its habitations are overflowed, it goes up to the higher ground, and in search of food frequently comes near inhabited places.

7. It is often observed to sit on its hind legs, like a dog when begging; but most commonly it flies at its victim with the swiftness of an arrow, and seizes it with complete certainty.

8. The ichneumon grows fast, and dies soon: it lives but a short time in the colder climates, where the rigour of the winter soon proves fatal to it: to obviate the effects of the cold, it wraps itself up into a ball, hiding

its head between its legs, and thus passes the whole day in sleeping.

9. But it compensates for its laziness in the day by the vigilance and activity it displays at night, in the pursuit of noxious animals.

LESSON 17.—*The Monkey.*

1. The varieties in the larger tribes of the monkey kind are but few; but, when we come to the smaller class, the differences among them seem too tedious to be mentioned.

2. There is indeed scarcely a country in hot climates that does not swarm with them, and scarcely a forest that is not inhabited by a race of monkeys different from all others.

3. Every different wood may be considered as a separate colony of monkeys, differing from those of the next district, in colour, size, and malicious mischief.

4. Indeed it is curious, that the monkeys of two parts are never found to mix with each other, but rigorously to observe a separation, and to guard their limits from intrusion of all strangers, of a race differing from themselves.

5. In their native woods, they are the plagues not less of man than other animals: they are in possession of every forest where they reside, and may be considered as the masters of the place.

6. Neither the tiger, nor even the lion, will venture to dispute the dominion; for the monkeys from the tops of the trees continually attack them; and by their agility escape all pursuit.

7. Nor have the birds less to fear from their incessant depredations; for, as they generally build upon the

trees, the monkeys are always on the watch to rob their nests; and such is their delight in mischief, that they will destroy their eggs, even when they are unable to eat them.

8. The large serpents are the only creatures which venture to oppose the monkey: they are frequently seen winding up the trees; and, when they happen to surprise the little animals while asleep, they swallow them whole, before they have time to prepare for defence.

9. Their enmity to mankind is sometimes ridiculous, and at others serious: they consider those who enter the woods as invaders of their dominions, and pursue them wherever they go with such amazing swiftness, that the eye can hardly follow their motions.

10. Although they take the greatest leaps, they are seldom seen to fall to the ground; for they easily fasten upon the branches, that break their fall, and cling by their hands, feet, or tail, wherever they touch.

11. The usual way of obtaining them alive is to shoot the female through the head, as she carries her young; and then both tumble to the ground.

12. If however the animal is not quite killed, it will not fall, but, clinging to some branch, continue even when dead its former grasp, and remain on the tree where it was shot.

LESSON 18.—*The Monkey, (concluded.)*

1. The natives consider these animals as their greatest plagues, for they come in companies to destroy the fields of Indian corn, rice, and the sugar plantations.

2. They carry off as much as they can, and spoil ten times more than they run away with. They are not contented with the first blade of corn or sugarcane; but

pull up those which appear the best; they then examine it; and, if they find it to their mind, they stick it under their arm.

3. If they should be interrupted in their depredations, one of them, who is continually on the watch, gives notice to the rest, who, throwing down the corn they hold in their left hands, make their escape with the remainder in their right: but, if they are still pursued, they throw down the whole of their burdens, and take refuge in the woods among the trees, on the tops of which they find perfect security.

4. The chief food of the monkey tribe consists of fruits, the buds of trees, or juicy roots and plants. Like man, they are all fond of sweets, and particularly of the juice of the sugarcane.

5. The fertile regions in which they breed generally supply them abundantly with vegetable food. But, should they feel an inclination for a more nourishing diet, they eat insects, worms, or even, if near the coast, oysters, and other kinds of shell-fish.

6. Their manner of eating an oyster is very singular, As the oysters of tropical climates are generally larger than those in Europe, the monkeys, when they go to the sea side, pick up a pebble, and insert it between the gaping shells of any oyster they may happen to find open. Having thus secured themselves from the shutting of the shells upon their paws, they then devour the oyster at their leisure.

7. They also catch crabs, by putting their tails to the holes where the animal takes shelter; and, when the crab has fastened upon it, they withdraw their tails from the holes with a sudden jerk, and thus obtain possession of their prey.

8. This habit of contriving snares for other animals renders them very cautious of being entrapped themselves; and it is said that no snare, however well baited, can catch the monkey of the West Indian islands; so well does it oppose the cunning of its disposition to the artifices of man.

9. The monkey generally brings forth one at a time; but when in a state of captivity is seldom found to breed.

10. Monkeys exhibit a very striking picture of parental affection for their offspring. The male and female are never tired of fondling the young one. They instruct it with assiduity; they hand it from one to the other, and, when the male has done showing his regard, the female takes her turn.

11. When wild in the woods, the female, if she happens to have two young ones, which is sometimes the case, carries one on her back, and the other in her arms: that on her back clings very closely, clasping its hands round her neck, and its feet about her middle.

12. There are few of these animals that are unacquainted with a variety of tricks, and feats of activity: indeed when tamed they are frequently very entertaining; and often fill up a vacant hour, when other amusement is wanting.

13. It is however in company with other animals of a more simple disposition, that their tricks and superior intelligence are generally shown; they seem to take a delight in tormenting their inferiors, and have been seen for hours together deranging the gravity of a cat.

14. The superiority indeed of these over other animals has induced the savages, of both America and Africa, to imagine them to be endowed with mental powers, equal to those of human beings; and to suppose

them idle, slothful, yet rational creatures, capable of speech and conversation, but obstinately dumb, for fear of being compelled to engage in active employments.

LESSON 19.—*The Bengal Loris.*

1. This animal is about the size of a cat, and of a pale brown or mouse colour, having a somewhat flat face, and extremely prominent eyes.

2. It is a nocturnal animal, very inactive and slow in its motions; and it sleeps, or at least lies motionless, during the greatest part of the day.

3. The late Sir William Jones has given an extremely pleasing account of one of these little creatures.

4. "In his manner (he says,) he was for the most part gentle, except in the cold season, when his temper seemed wholly changed; and his Creator, who made him so sensible of cold, to which he must often have been exposed, even in his native forests, gave him, probably for that reason, his thick fur, which we rarely see on animals in these tropical climates.

5 "To me, who not only constantly fed him, but bathed him twice a week in water accommodated to the seasons, and whom he clearly distinguished from others, he was at all times grateful; but, when I disturbed him in winter, he was usually indignant, and seemed to reproach me with the uneasiness which he felt, though no possible precautions had been omitted to keep him in a proper degree of warmth.

6. "At all times he was pleased with being stroked on the head and throat; and he frequently suffered me to touch his extremely sharp teeth: but his temper was always quick; and, when he was unseasonably disturbed, he expressed a little resentment by an ob-

secure murmur, like that of a squirrel, or a greater degree of displeasure by a peevish cry, especially in winter, when he was often as fierce, on being much importuned, as any beast of the wood.

7. "From half an hour after sunrise to half an hour before sunset, he slept without intermission, rolled up like a hedgehog; and, as soon as he awoke, he began to prepare himself for the labours of his approaching day, licking and dressing himself like a cat; an operation which the flexibility of his neck and limbs enabled him to perform very completely: he was then ready for a slight breakfast, after which he commonly took a short nap; but, when the sun was quite set, he recovered all his vivacity.

8. "His ordinary food was the sweet fruits of this country, plantains always, and mangoes during the season; but he refused peaches, and was not fond of mulberries, or even of guavas: milk he lapped eagerly, but was content with plain water.

9. "In general he was not voracious, but he never appeared satisfied with grasshoppers; and passed the whole night, while the hot season lasted, in prowling for them. When a grasshopper, or any insect, alighted within his reach, his eyes, which he fixed on his prey, glowed with uncommon fire; and, having drawn himself back to spring on it with greater force, he seized the prey with both his fore paws, but held it in one of them while he devoured it.

10. "For other purposes, and sometimes even for that of holding his food, he used all his paws indifferently as hands; and frequently grasped with one of them the higher part of his ample cage, while his three others were severally engaged at the bottom of it: but the posture

of which he seemed fondest was to cling with all four of them to the wires, his body being inverted.

11. "In the evening he usually stood erect for many minutes, playing on the wires with his fingers, and rapidly moving his body from side to side, as if he had found the utility of exercise in his unnatural state of confinement.

12. "A little before daybreak, when my early hours gave me frequent opportunities of observing him, he seemed to solicit my attention; and if I presented my finger to him, he licked or nibbled it with great gentleness; but eagerly took fruit when I offered it, though he seldom ate much at his morning repast. When 'the day brought back his night,' his eyes lost their lustre and strength, and he composed himself for a slumber of ten or eleven hours.

13. "My little friend was, on the whole, very engaging; and when he was found lifeless, in the same posture in which he would naturally have slept, I consoled myself with believing that he died without much pain, and lived with as much pleasure as he could have enjoyed in a state of captivity."

Lesson 20.—*The Arctic Walrus.*

1. The walrus is an animal of enormous size, measuring nearly eighteen feet in length, and ten or twelve in circumference.

2. It has a round body, short neck, and small head, with two long tusks in the upper jaw, which bend downward.

3. When we consider the enormous size and strength of these animals, and that they are furnished with weapons so powerful as the long tusks which project from

their upper jaw, it is not without surprise we learn that their general disposition and habits are peaceful and inoffensive.

4. The uses, to which their tusks are applied, are the scraping of shell-fish and other prey out of the sand, and from the rocks; they are likewise employed in aiding their ascent upon the islands of ice, and as weapons of defence against the attacks of their enemies.

5. If however their passions be roused by provocation or attack, these animals are sometimes exceedingly furious and vindictive.

6. When surprised on the ice, the females first provide for the safety of their young ones, by flinging them into the sea, and conveying them to a secure distance; they then return with great rage to the place where they were attacked, for the purpose of revenging any injury they may have received. They will sometimes attempt to fasten their teeth on the boats in order to sink them, or will rise under them in great numbers, with the intention of oversetting them; at the same time exhibiting all the marks of rage, roaring in a dreadful manner, and gnashing their teeth with great violence. They are strongly attached to each other, and will make every effort in their power, even to death, to liberate a harpooned companion.

7. A wounded walrus has been known to sink beneath the surface of the ocean, rise suddenly again, and bring up with it multitudes of others, who have united in an attack on the boat from which the insult came.

8. The following is Captain Cook's description of a herd of walruses, that were seen floating on a mass of ice off the northern part of the continent of America.

9. "They lie in herds of many hundreds upon the

ice, huddling over one another like swine; and roar or bray so loud that, in the night, or any foggy weather, they give us notice of the vicinity of the ice before we could see it.

10. "We never found the whole herd asleep, some being always upon the watch. These, at the approach of the boat, would wake those next to them; and, the alarm being thus gradually communicated, the whole herd would be awakened. But they were seldom in a hurry to get away, till after they had been once fired at.

11. "They then would tumble over one another into the sea, in the utmost confusion. And, if we did not, at the first discharge, kill those we fired at, we generally lost them, though mortally wounded. Vast numbers of these animals would follow and come close up to the boats; but the flash of a musket in the pan, or even the pointing of a musket at them, would send them down in an instant.

12. "The female walrus will defend her offspring to the very last, and at the expense of her own life, whether in the water or upon the ice. Nor will the young one quit the dam, though she be dead; so that, if one be killed, the other is a certain prey."

13. We are informed by Crantz, in his account of Greenland, that walruses, when playing about in the water, have been frequently observed, with their long tusks, to draw sea-fowl beneath the surface, and after a little while to throw them up into the air. As they are not carnivorous animals, but live entirely on shell-fish and marine plants, they do not eat these birds; consequently this can be done only out of wantonness and frolic.

14. The tusks of the walrus, which weigh from ten

to thirty pounds each, are used as ivory; but the animals are sought after principally for the sake of their oil. A very strong and elastic leather, it is said, may be prepared from the skin. The animals frequently weigh from 1500 to 2000 pounds, and yield from one to two barrels of oil each.

LESSON 21.—*Of Ruminating Animals.*

1. Those that chew the cud are of all animals the most harmless, and easily tamed. As they subsist entirely upon vegetables, it is neither their interest nor their inclination to make war upon any of the brute creation.

2. Satisfied with the pastures in which they are placed, they have no desire to change as long as they are sufficiently supplied; and, fearing nothing from each other, they generally herd together for their mutual defence.

3. As the food of these animals is more easily procured than that of the carnivorous kind, so they are more indolent and less artful than the latter: their appetites are more simple, and their instincts less capable of variation.

4. As these animals are furnished by nature with an appetite for food so coarse and simple, so they have in general four stomachs, through which the food passes in succession, and intestines of corresponding capacity.

5. Carnivorous animals, on the contrary, whose food is nourishing, have small stomachs and short intestines.

6. But, in those animals whose pasture is coarse, their stomachs are large and numerous, and their intestines long and muscular; for, much food must be accumulated, before a sufficient quantity of nourishment can be obtained.

7. Of the four stomachs with which ruminating animals are supplied, the first is called the paunch; and the second, which is merely a continuation of the first, the honeycomb: in these the food, after having been slightly chewed, is accumulated.

8. This second stomach has two apertures, one of which is small, and opens into the third, and the other large, communicating with the gullet.

9. The animal has the power of expelling the half-chewed food from the first two stomachs, and forcing it into the mouth, where the creature masticates it a second time more completely, and renders it sufficiently fluid to pass through the smaller aperture of the second stomach into the third.

10. In the third stomach, which is called the manifold, the food undergoes a still further division; but, as it is still incapable of contributing to the animal's nourishment, it requires the operation of the fourth stomach finally to complete the process of digestion.

11. In addition to the animals strictly of the ruminating kind, there are others which enjoy this faculty in a less marked degree; and it has even been asserted, that some of the human species have been known to ruminate.

12. Instances however of this kind are so very rare, that the certainty of the rumination of human individuals cannot be admitted, till more numerous examples of it are authentically recorded.

LESSON 22.—*The Buffalo.*

1. The buffalo is more clumsy and awkward in figure than the ox: his air is wilder, he carries his head nearer

to the ground, his limbs are less fleshy, his tail less furnished with hair: his body is thicker than that of the ox kind, his legs are higher, his horns not so round, with a bunch of curled hair hanging down between them: his skin also is harder, thicker, blacker, and less hairy; and his flesh, which is hard and blackish, is not only disagreeable in its taste but also in its smell.

2. The milk of the female is not so good as that of the cow, but it is produced in greater abundance. In warm climates the milk of this animal furnishes nearly all the butter and cheese.

3. The most valuable part of this animal seems to be the hide, the leather of which is remarkable for its thickness, softness, and impenetrability.

4. As the buffalo is larger and stronger than the ox, it is advantageously employed in drawing burdens, and sometimes in carrying them, being guided by a ring, which is thrust through the nose. Two buffaloes are said to be capable of drawing more than four strong horses.

5. This animal is found wild in many parts of India, and can be easily tamed whenever its services are required.

6. The wild animals are very dangerous, and are often found to gore travellers, and then to trample them to death under their feet: in the woods however they are not so much to be dreaded; for, in the violence of their pursuit, their large horns are often entangled among the trees, so as to enable those who have been surprised to escape the danger.

7. The Negroes of Guinea, and the Indians of Malabar, where buffaloes exist in great numbers, delight in hunting and destroying them: they never face the animal openly, but generally, climbing up a tree, they shoot

at him from thence, and do not descend till they have completely dispatched him.

8. No animal when tamed can be more patient or humble; and, though not so docile as the ox, yet they undergo their labours with more perseverance.

9. The female produces but one calf at a time, and goes three months longer than the cow.

10. If unmolested, they are generally inoffensive animals; but, when wounded, nothing can stop their fury: they then turn up the ground with their fore feet, bellow much louder than the bull, and pursue the object of their resentment with ungovernable fury.

11. It is however worthy of remark that, although their horns are very formidable, they generally make more use of their feet in combat, and rather tread their enemies to death than gore them.

Lesson 23.—*The Antelope.*

1. Of the antelope, or, as it was formerly denominated, gazelle, there are several kinds, which cannot with propriety be referred to either the goat or the deer.

2. They almost all inhabit the hottest parts of the world, and only two kinds are met with in Europe; but their proper climates seem to be those of Asia and Africa, where the species are very numerous.

3. The antelopes are animals generally of a most elegant and active make, of a restless and timid disposition, extremely watchful, and of great vivacity, remarkable for their swiftness and agility; and most of their bounding are so light, as to strike the spectator with astonishment.

4. What is very singular is, that they will stop in the

middle of their course, gaze a moment at their pursuers, and then resume their flight.

5. It being a favourite amusement with the eastern nations to hunt these animals, there can be no doubt of the rapid speed of the antelope-tribe.

6. As the swiftest of the dogs, the greyhound, is generally unequal to the course, the sportsman is obliged to call in the aid of the falcon, a large kind of hawk trained for the purpose of seizing on the animal, and hindering its motion, in order to give the dogs an opportunity of taking it.

7. In other countries a species of leopard is made use of in the chase: this animal avails itself not so much of swiftness of foot, as of the greatness of its spring, for taking its prey; in this way its motions are similar to those of the antelope which it pursues. But, should the leopard once fail in its spring, the game makes its escape into a place of safety.

8. Some kinds of antelopes form herds of two or three thousand, while others keep in troops of five or six; they are most frequently found in hilly countries, though some inhabit plains.

Lesson 24.—*The Musk-Deer.*

1. This animal belongs to a tribe whose form and mode of life have, from a want of sufficient investigation, remained almost entirely unknown.

2. The number of the species with which we are at present acquainted amounts only to seven: these are found to be the inhabitants of warm countries, and, like the other animals in mountainous situations, pass their life in places which are difficult of access; displaying

the greatest agility when hunted by the sportsman, they seek shelter among the highest precipices.

3. The much esteemed medicine and delightful perfume, called musk, is found in an oval receptacle, which is hard, and as large as an egg: it is peculiar to the male animal, and is placed about the middle of the belly.

4. The animal from which the most valuable musk is obtained is the musk-deer of Thibet, measuring about three feet in length, and about two feet three inches in height; the tail, from its extreme shortness, can scarcely be seen: its general colour is a deep iron gray; its ears are of a considerable size, the upper jaw is much longer than the lower, and is furnished on both sides with a curved tusk, extending about two inches out of the mouth, and having sharp edges on the inside.

5. Few substances have a stronger and at the same time a more agreeable smell than the musk produced by this animal.

6. A grain of it perfumes a whole room, and its odour continues for some days without diminution; but in larger quantities it continues for years together, and seems scarcely wasted in its weight, although it has filled the air to a great distance with its parts.

Lesson 25.—*The Rein-Deer.*

1. Among those of the deer kind, there is no animal, the history of which is more interesting than that of the rein-deer. It is found only in cold situations, and, if removed from them, it declines and dies after a short time.

2. From it alone the natives of Lapland and Greenland supply most of their wants: it answers the purpose of a horse to convey them and their scanty furni-

ture from one mountain to another; it supplies the place of a cow in giving milk; and it serves the same end as the sheep, in furnishing a warm though a homely kind of clothing.

3. Thus Providence does not leave these poor mortals entirely destitute, but gives them a faithful domestic, more patient and serviceable than almost any other animal in nature.

4. The rein-deer is of lower but stronger figure than the stag: its legs are shorter and thicker, and its hoofs much broader than in that animal; its hair is much thicker and warmer; its horns much larger in proportion, and branching forward over its eyes.

5. When it proceeds on a journey, it lays its great horns on its back; but still there are always two branches which overhang its face. This species is particularly distinguished, by its female having horns like the male; they are however smaller and less branched than those of the male.

6. In Lapland the rein-deer is converted to the utmost advantage; and some herdsmen of that country are known to possess above a thousand in a single herd.

7. In the morning, as soon as they drive the deer to the pasture, their greatest care is to keep them from the tops of the mountains, where there is no food, but where they go merely to be at ease from the countless multitudes of gnats and gadflies, which are for ever annoying them.

8. The men with their dogs confine them in the places where their food is in the greatest plenty, guarding them the whole day with the utmost care, and driving them home at the proper seasons for milking.

9. The female brings forth her young in the middle

of May, and gives milk till about the middle of October. Every morning and evening, during summer, the herdsman returns to the cottage with his deer to be milked, where the women have previously kindled up a smoky fire, in order to keep the rein-deer quiet while being milked, by driving away their constant persecutors, the gnats and gadflies.

10. In the winter time the deer, with instincts adapted to the soil, search out their food, though covered with the deepest snow.

11. It sometimes happens however, though but rarely, that the winter commences with rain, and a frost ensuing covers the whole country with a strong crust of ice: then indeed both the Laplander and his rein-deer are undone; they have no provisions laid up in case of accident, and the only resource is to cut down the large pine trees, which are covered with moss; this furnishes but a scanty supply; so that the greatest part of the herd is then seen to perish, without any hope of assistance.

LESSON 26.—*The Rein-Deer (concluded.)*

1. The rein-deer in Lapland are of two kinds, the wild and the tame. The wild are larger and stronger, but more mischievous than the others.

2. They are better fitted for drawing the sledge, to which they are accustomed at an early age, and are yoked by a strap, which goes round the neck and comes down between the legs.

3. The sledge is extremely light, and covered at the bottom with the skin of a young deer, the hair being turned outwards to slide on the snow. The person

who sits on the sledge guides the animal with a cord fastened round the horns, and with his voice encourages it to proceed.

4. Some of the wild kind will often attack the drivers, who have then no other resource, than to protect themselves by their sledge from the rage of the animal.

5. But no creature can be more active, patient, and willing, than the tame rein-deer, which in general can go about thirty miles without halting, and this without any great or dangerous effort.

6. The rein-deer go with young above eight months, and generally bring forth two at a time. The fondness of the dam for her young is very remarkable: it often happens that, when they are separated from her, she will return from the pasture, keep calling round the cottage for them, and will not desist until, dead or alive, they are brought and laid at her feet.

7. There is scarcely any part of this animal that is not converted to its peculiar uses. As soon as it begins to grow old, it is killed, and the flesh dried in the air; it is also sometimes hardened with smoke, and laid up for travelling provision, when the natives change their abode from one part of the country to another.

8. The milk is warmed and thickened with rennet, and then the curd is made into cheese, which is well tasted.

9. The skin is even a more valuable part of this animal than either of the former; from it the Laplanders make their shoes, their clothes, and their beds.

10. In short, no part of this animal is thrown away as useless: the horns are sold to be converted into glue, and the sinews are dried and divided, so as to make the strongest kind of sewing thread, not unlike catgut.

11. The tongues, which are considered a great delicacy, are dried, and sold in other provinces. Thus the Laplander finds all his necessities amply supplied from this single animal; and he who has a large herd of rein-deer has no idea of higher luxury.

LESSON 27.—*Domestic Economy of Birds.*

1. Nature appears to have endowed the male bird with the faculty of singing, with a view of alleviating the fatigue of incubation, and the nursing of the helpless brood, which almost entirely devolve on the female.

2. It at once fulfils the threefold purpose of an amusement to her, while she is sitting on her eggs; of a blandishment by which her affections are first attracted and afterwards fixed; and lastly, it operates as an assurance to her of the absence of danger and molestation.

3. During the time of hatching, when his mate is confined within the nest, the male perches on a tree in the neighbourhood, and continues to sing, and to watch.

4. The female remains unapprehensive of any enemy so long as she continues to hear the harmonious warbler, who on a sudden stops his loud and sportive notes on the least appearance of danger.

5. This is always a certain signal for the female to provide for the safety of herself, and if possible, of her little ones.

6. The little birds display more delicate contrivance in the construction of their nests than is observable in those of large birds; for, the materials with which the former build are of a warmer nature, in proportion to the increased smallness of their bodies.

7. Small things are cooled more quickly than larger ones, because their surfaces are larger in proportion to their size; so that the eggs of small birds, being liable to lose their warmth more quickly than those of the larger kinds, naturally require nests in which the heat can be more easily sustained.

8. They are consequently lined on the inside with softer substances, covered over in a more accurate manner, and so constructed as to render them more commodious and warm.

9. It sometimes occurs, that the operations of the little architects are interrupted, and they are obliged to build such a nest as they can, and not such as they would have chosen.

10. The greatest care and sagacity are displayed by the male and female, in concealing the nest when it is finally completed.

11. It is built in bushes, and is entirely hidden from view, by a careful disposition of the surrounding branches: if it is deposited among moss, no appearance is left externally of the existence of any habitation within.

12. Some birds adopt the greatest precautions, never to go in or out while there is any one near to observe them; and they are always careful to fix the nest in those situations in which they are not likely to be incommoded by scarcity.

LESSON 28.—*Domestic Economy of Birds (concluded.)*

1. There is a great contrast between the brooding of the small and that of the great birds: the former show considerable assiduity during the whole period, and the nest is always occupied by the male while the female is obliged to be absent seeking food.

2. The eggs of the larger birds, on the contrary, take no damage during their absence, which is often of considerable duration.

3. Singing birds derive their food from insects and worms during their early age; and some which, when full grown, feed only upon grain, when in the nest live entirely on insects.

4. For some time after they are hatched, the young birds are in no need of food; but they soon feel the approaches of hunger, and by their chirping and gaping soon excite the parent to go in search of the supply they require.

5. During the interval of her absence they cherish each other by their mutual warmth, and lie as close together as possible; at the same time preserving a perfect silence, they do not utter the slightest note till the return of the parent.

6. When she arrives she announces her presence by a chirp, which is perfectly understood by them, and, answering it all together, they petition for their appropriate portions.

7. The female distributes a supply to each in turn, and, by giving them food often, but in small quantities, carefully avoids the danger that might arise from gorging them.

8. After having thus hatched and brought up the young birds, it still remains for the parents to usher them from the nest into life; and this they perform with an assiduity worthy of remark.

9. The old ones, in fine weather, when the young chicks are fully fledged, and quite able to fly, lead them a few yards from the nest, and then oblige them to go back again.

10. In the same manner they are conducted abroad for two or three days successively, to seek more distant adventures on each occasion.

11. At length the parent perceives that they have gained sufficient strength to fly alone and shift for themselves; she then entirely forsakes them, and ever afterwards pays no more regard to them than to any other of the birds in the same flock.

LESSON 29.—*The Parrot.*

1. The parrot is a tropical bird, and is found from twenty-four to twenty-five degrees on either side of the equator.

2. Although it lives in the temperate climates of Europe, yet it does not frequently breed there: and its spirits and longevity are diminished in a temperature so little suited to the warmth of its constitution.

3. Parrots are so various in size, and in the shades and distributions of their colours, that it is utterly impossible for language to describe nature in all her gradations and varieties of them.

4. So great is their variety, that nothing seems more remarkable, than that only one species of them was known to the ancients, at a period when they boasted of being masters of the whole world.

5. Of a hundred species now known, scarcely one naturally breeds in the countries that acknowledged the Roman power: a striking proof how ill founded the pretensions of that people were to universal dominion.

6. The green parroquet with a red neck is the first of this genus that was brought into Europe, and is now only known by the descriptions given of it by the ancients.

7. Birds of this tribe are subject to disorders unknown to the rest of the feathered tribes: many of them die of the epilepsy and the gout.

8. They are however remarkable for longevity; and there are some well attested instances of their having lived from fifty to sixty years.

9. But from twenty to thirty years may be considered as the common period which these birds live, when well kept. after that space, the bill becomes generally so much hooked, that they are deprived of the power of taking food.

10. They commonly breed in the hollow parts of old trees which have begun to rot sometimes, availing themselves of the labours of the woodpecker, they seize upon the hole which it has industriously scooped out.

11. The larger kinds lay only two eggs at one time, but these they lay twice in the year.

12. The smaller kinds, which from their weakness are more exposed to devastation, are probably more prolific, for, nature constantly replenishes those species which are most easily destroyed, by conferring on them a superior degree of fecundity.

13. As it is only when the parrots are taken young that they can be successfully tamed, the savages commonly take them while in the nest.

14. They sometimes however catch them when full grown, for food, and sort their feathers, which they convert into valuable articles of dress. For this purpose they have various contrivances.

15. They sometimes mark the trees upon which they perch, and during the night bring sulphureous substances, which they burn around them: by the fumes of these the creatures are suffocated, and fall to the ground.

16. In some places they stun them with arrows wrapped at the point with cotton; in others they cut down the tree in which the nest is built.

17. In New Spain, where the feathers constitute an article of regular commerce among the natives, they take possession of a number of trees where the parrots breed, which they transmit as an inheritance from father to son; and these trees form often the principal part of their immoveable property.

LESSON 30.—*The Bird of Paradise.*

1. The wildest and most improbable fictions have been propagated and believed concerning the bird of paradise; so called, because its residence was supposed to be in the earthly paradise.

2. It was believed by the credulous and ignorant (the most numerous class of men) that it lived only upon the air and the dew; that it had no entrails nor feet; but remained perpetually floating upon the air, while sleeping as well as while awake, while hatching and laying its eggs as well as while procreating its young.

3. Instead of a stomach and intestines, which to so extraordinary a feeder would have been useless, the cavity of its abdomen was said to be filled with fat.

4. The hunters who procure and sell these birds, cut off their legs and take away their entrails, the better to preserve and carry them; and perhaps too with a view to perpetuate the belief of those fables which they have found so beneficial to their trade.

5. If anything could give an air of probability to the perpetual flying of the bird of paradise, it might be its extraordinary lightness.

6. A bird no larger than a thrush, swelled to an

immense bulk by its feathers, is rendered specifically lighter than any other.

7. About forty or fifty long feathers spring from each side below the wing, which, mingling with those of the tail, augment the apparent size of the animal, adding however hardly anything to its weight.

8. However well qualified to support itself in the air, the bird of paradise is unable to direct its flight either across or in opposition to the wind; and it is observed to prefer those places which are most sheltered.

9. This tribe is rendered still more remarkable, by two long naked feathers, which, like threads, rise above the false tail already described.

10. These are of an enormous length, extending above a foot beyond the longest of that large mass.

11. The head, back, and breast of these birds are covered with short straight feathers, which to the touch are soft like velvet.

12. They are of different colours, and so changeable in their hue, that they vary continually, according to the different points from which they are viewed.

13. They are confined in their residence to a few of the Spice islands, and New Guinea.

14. Their decided preference of the spice trees has led some to believe that they find upon them their favourite food.

15. Linnæus however asserts that they are eaters of insects, and feed mostly on the butterfly.

16. Their usual residence is in the woods, where they are shot by the Indians with arrows of reeds.

17. For this purpose the Indians have a curious method of concealing themselves in small huts, that are fastened among the branches of the trees.

18. Belon pretends that the bird of paradise is the same with the phœnix of the ancients; but there is reason to believe that the history of the phœnix is altogether fabulous.

19. The king of the birds of paradise was so called, from an old notion that each species of the birds of paradise had its own king, to which every individual paid submission and obedience; that this king always flew in a higher region of the air than his subjects, from which he issued various orders to them, such as to go and examine the springs where he might drink with safety, and to taste of them before him.

20. This alleged king of the birds of paradise in many circumstances resembles that species of birds, and in more perhaps differs from it.

21. His head is garnished with the same velvet covering; his eyes are equally small; and he has the two filaceous and naked feathers going beyond the tail.

22. These are however much inferior in length, and their extremity is barbed, or curled up like a lock of hair.

23. He differs from the birds of the last species, in wanting that large mass of feathers above the tail: he is of smaller size; his bill is longer and whiter; his wings are also longer; and he has not the long feathers under them that distinguish these singular creatures.

24. There are three or four other species of birds of paradise, all singularly fantastical in their appearance, and partly justifying the fanciful accounts that travellers have given of them.

LESSON 31.—*The Mocking-bird.*

1. The mocking-bird of America is the favourite songster of that country, where in general the birds are

more remarkable for the beauty of their plumage than for the excellence of their notes.

2. Nature does not appear to have endowed this interesting bird with a beauty of plumage allowing of comparison with the other feathered inhabitants of the same country.

3. Its qualifications are entirely of a different kind, and tend to endear it much more than insipid and unassisted elegance of form is likely to do. It is but a plain bird to the eye, of a white and gray colour, and a reddish bill.

4. To its own natural notes, which display much harmony and solemnity, it adds the wonderful faculty of counterfeiting the notes of every bird in the forest.

5. We are also informed, that it even appears to sport itself in leading them astray: sometimes it entices the smaller birds with the notes of their companions, and then frightens them away suddenly by imitating the screams of the eagle.

6. The mocking-bird is always surest to entertain when it is most left to itself; quite unlike those birds that are generally prized by us for their powers of imitation, and which have no merit of themselves, but require the most diligent and laborious instruction.

7. When at perfect liberty, it usually frequents the houses of the American planters; and remains during the whole night perched on a chimney top, pouring forth the sweetest and most varied notes of any bird in the country.

8. If we are warranted in giving credence to the accounts which have come to us, it would appear that this bird alone, by the excellence of its harmony, fully compensates for the deficiency of other singing birds in America.

9. They often build their nests in the fruit-trees about houses, and are rendered domestic without much trouble: they live entirely on berries and other fruits, which they find in the neighbourhood of their little retreats.

Lesson 32.—*The Eagle.*

1. The golden eagle is the largest and the noblest of all those birds that have received the name of Eagle.

2. It weighs above twelve pounds. Its length is three feet; the extent of its wings seven feet four inches; the bill is three inches long, and of a deep blue; and the eye of a hazel colour.

3. In general these birds are found in mountains and thinly inhabited countries, and breed among the loftiest cliffs.

4. They choose those places which are most remote from man, upon whose possessions they but seldom make their depredations, being contented rather to follow the wild game in the forest than to risk their safety to satisfy their hunger.

5. This fierce animal may be considered among birds as the lion among quadrupeds; and in many respects they have a strong similitude to each other.

6. They are both possessed of force, and an empire over their fellows of the forest. Equally magnanimous, they disdain small plunder, and only pursue animals worthy the conquest. It is not till after having been long provoked by the cries of the rook or the magpie, that this generous bird thinks fit to punish them with death.

7. The eagle also disdains to share the plunder of another bird; and will take up with no other prey than that which he has acquired by his own pursuit.

8. How hungry soever he may be, he stoops not to

carrion; and, when satiated, never returns to the same carcass,..but leaves it for other animals, more rapacious and less delicate than himself.

Lesson 33.—*The Eagle, (concluded)*

1. Of all the feathered tribes, the eagle flies the highest; and therefore the ancients gave him the title of the bird of heaven.

2. He possesses also the sharpest sight; but his sense of smelling, though acute, is inferior to that of a vulture. He never pursues, but when his object is in view; and, having seized his prey, he stoops from his height, as if to examine its weight, always laying it on the ground before he carries it off.

3. He finds no difficulty in taking up geese and cranes. He also carries away hares, lambs, and kids; and often destroys fawns and calves, to drink their blood; and bears a part of their flesh to his retreat.

4. Infants themselves, when left unattended, have been destroyed by this rapacious creature.

5. An instance is recorded in Scotland, of two children having been carried off by eagles; but fortunately they received no hurt by the way; and, the eagles being pursued, the children were found unhurt in the nests, and restored to the affrighted parents.

6. The eagle is thus at all times a formidable neighbour: but peculiarly so when bringing up its young. Then the male and female exert all their force and industry to supply their offspring.

7. Smith, in his history of Kerry, relates that a poor man in that county got a comfortable subsistence for his family, during a summer of famine, out of an eagle's

nest, by robbing the eaglets of food, which was plentifully supplied by the old ones.

8. He protracted their care beyond the usual time, by clipping the wings, and retarding the flight of the young; and very probably also, as such an effect is known to have been so produced, by so tying them as to increase their cries, which are always found to increase the parents' dispatch to procure them provisions.

9. It was fortunate however that the old eagles did not surprise the countryman thus employed, as their resentment might have been dangerous.

10. It requires great patience and much art to tame an eagle, and, even though taken young, and subdued by long assiduity, yet it is a dangerous domestic, and often turns its force against its master.

11. When brought into the field for the purposes of fowling, the falconer is never sure of its attachment: its innate pride, and love of liberty, still prompt it to regain its native solitudes.

12. Sometimes however eagles are brought to have an attachment to their feeder they are then highly serviceable, and liberally provide for his pleasures and support.

13. When the falconer lets them go from his hand, they play about and hover round him till their game presents itself, which they see at an immense distance, and pursue with certain destruction.

14. It is said that the eagle can live many weeks without food; and that the period of its life exceeds a hundred years: but these stories are not well confirmed.

Lesson 84.—*The Pelican.*

1. The pelican is a large web-footed bird, with very wide wings.

2. The sides of the head are naked: and on the back of the head there is a kind of crest.

3. The whole plumage is whitish, suffused with a pale bluish colour; except some parts of the wings, which are black.

4. The bag in the lower mandible of the bill of this bird is one of the most remarkable members that are found in the structure of any animals. Though it wrinkles up nearly into the hollow of the chap, and the sides to which it is attached are not (in a quiescent state) above an inch asunder, it may be extended to an amazing capacity; and, when the bird has fished with success, its size is almost incredible.

5. It will contain a man's head with the greatest ease: and it has been said that even a man's leg, with a boot on, has been hidden in one of these pouches.

6. In fishing, the pelican fills this bag, and does not immediately swallow his prey; but, when the bag is full, he returns to the shore, to devour at leisure the fruits of his industry.

7. He is not long in digesting his food; for he has generally to fish more than once in the course of a day.

8. At night, when the toils of the day are over, these birds, which are lazy and indolent, when they have glutted themselves with fish, retire a little way on the shore to take their rest for the night. Their attitude in that state is with their head resting against the breast.

9. They remain almost motionless till hunger calls them to break off their repose: thus they pass nearly the whole of their life in eating and sleeping.

10. When thus incited to exertion, they fly from the spot, and, raising themselves thirty or forty feet above the surface of the sea, turn their head with one eye downward, and continue to fly in that position till they see a fish sufficiently near the surface.

11. They then dart down with astonishing swiftness, seize it with unerring certainty, and store it in their pouch. Having done this they rise again, and continue the same action till they have procured a competent stock.

12. Whence it was that the ancients attributed to this stupid bird the admirable qualities and parental affection for which it was celebrated amongst them, it is not easy to imagine; unless, struck with its extraordinary figure, they were desirous of supplying it with propensities equally extraordinary.

13. For, in truth, the pelican is one of the most heavy, sluggish, and voracious, of all the feathered tribes; and is but ill fitted to take those vast flights, or to make those cautious provisions, which have been mentioned.

14. It is however by no means destitute of natural affection, either towards its young ones, or towards others of its own species.

15. Clavigero, in his history of Mexico, says that sometimes the Americans, in order to procure without trouble a supply of fish, cruelly break the wing of a live pelican, and, after tying the bird to a tree, conceal themselves near the place.

16. The screams of the miserable bird attract other pelicans to the place, which, he assures us, eject a portion of the provision from their pouches, for their imprisoned companion.

17. As soon as the men observe this, they rush to the

spot, and, after leaving a small quantity for the bird, carry off the remainder.

18. The female feeds her young ones with fish, macerated for some time in her bag.

19. Labat informs us that he caught two pelicans when very young, and tied them by the leg to a post stuck into the ground; and he had the pleasure of seeing one of the old ones come for several days to feed them, remaining with them the greatest part of the day, and passing the night on the branch of a tree that hung over them.

20. By these means they all three became so familiar as to suffer themselves to be handled; and the young ones always took the fish that he offered to them, storing it first in their bags, and then swallowing it at leisure.

21. The pelican has often been rendered domestic; and this writer assures us, that he saw one among the Americans so well trained, that it would, at command, go off in the morning, and return before night, having its pouch distended with prey, part of which it was made to disgorge, and the rest it was permitted to retain for its trouble.

22. According to the account of Faber, a pelican was kept in the court of the Duke of Bavaria above forty years.

23. He says that it seemed fond of being in the company of mankind; and that, when any one sang, or played on an instrument, it would stand perfectly still, turn its ear to the place, and with its head stretched out, would seem to pay the utmost attention.

24. We are told that the emperor Maximilian had a tame pelican that lived more than eighty years, and

always attended his soldiers when on their marches. M. de Saint Pierre mentions having seen, at Cape Town, a large pelican playing with a great dog, whose head she often, in her frolic, took into her enormous beak.

LESSON 35.—*The Crested Penguin.*

1. The penguins are nearly two feet in length, and walk erect.

2. The wings are small, and more like fins than wings: they are covered with feathers not longer than those of the rest of the body; so that these birds are altogether incapable of flying.

3. They however swim with great swiftness; and are fortified against the effects of a long continuance in the cold water, by closely covered feathers and an abundance of fat.

4. While swimming, they sink above the breast, the head and neck only appearing out of the water; and they run themselves along with their finny wings as with oars.

5. On meeting with any obstacle in their course, they leap quite out of the water, sometimes to the height of three or four feet.

6. Over each eye they have a stripe of pale yellow feathers, which lengthens behind into a crest about four inches long. When provoked, they erect their crest in a very beautiful manner; and sometimes, when attacked, run violently at their assailants, biting their legs or any part of their clothes.

7. Though the crested species seem more lively than almost any of the others, yet they are very stupid, and so regardless of their own safety as to suffer themselves to be beaten down with a stick, or to be taken with the hand.

8. Their sleep is extremely sound; for, Dr. Sparrman, accidentally stumbling over one of them, kicked it several yards without disturbing its rest; nor was it until after being repeatedly shaken that the bird awoke.

9. They are very tenacious of life. Mr. Forster left a great number of them, apparently lifeless from the blows they had received, while he went in pursuit of others; but they all afterwards got up, and marched off with the utmost gravity.

10. These birds form their nests among those of the pelicans, and live in tolerable harmony with them.

11. The female generally lays a single egg. Their nests are holes in the earth; which they easily form by means of their bill, throwing back the dirt with their feet.

12. They are often found in great numbers on the shores where they have been bred.

Lesson 36.—*The Flamingo.*

1. The body of the flamingo, (which is of a beautiful scarlet,) is about the size of that of a goose; but its neck and legs are of such extraordinary length, that, when it stands erect, it is upwards of six feet in height.

2. When the Europeans first visited America, they found the flamingos on the shores tame and gentle, and no way distrustful of mankind.

3. If one of them was killed, the rest of the flock, instead of attempting to fly, only regarded the fall of their companion with a kind of fixed astonishment: another and another shot was discharged; and thus the fowler often levelled the whole flock, without one of them attempting to escape.

4. Now, however, they regard us with aversion. Wherever they haunt, one of the number, it is said, is always appointed to watch while the rest are employed in feeding; and, as soon as he perceives the least danger, he gives a loud scream, in sound not much unlike a trumpet, and instantly the whole flock is on the wing.

5. They feed in silence; but, when thus roused, they all join in the noise, and fill the air with their screams.

6. Their nest is of a singular construction. It is formed of mud in the shape of a hillock, with a cavity at the top.

7. In this the female generally lays two white eggs, the size of those of a goose, but longer.

8. The hillock is of such a height as to allow the bird to sit on it, or rather stand, as her legs are placed one on each side at full length.

9. Lenacus tells us, that she will sometimes lay her eggs on the projecting part of a low rock, if it happen to be sufficiently convenient to admit of the legs being placed in this manner on each side.

10. It is not until a long time after they are hatched that the young ones are able to fly; but they can previously run with amazing swiftness.

11. They are sometimes caught at this age; and, very different from the old ones, they suffer themselves to be carried away, and are easily tamed.

12. In five or six days they become familiar, and will even eat out of the hand; and they drink a surprising quantity of sea water.

13. But, though easily rendered domestic, it is difficult to rear them; as they are apt to decline, from the want of their natural food.

14. Flamingos are often met with in the warmer parts

of the old continent; and, except in the breeding time, they are generally found in great flocks.

15. When seen at a distance, they appear like a regiment of soldiers; being often ranged alongside of one another on the borders of the rivers, searching for their food, which consists principally of small fish and water insects: these they take by plunging the bill and part of the head into the water; and from time to time trampling the bottom with their feet, to disturb the mud, in order to raise up their prey.

16. In feeding, they are said to twist their neck in such a manner that the upper part of the bill is applied to the ground.

Lesson 37.—*The Stork.*

1. The stork is about three feet in length. Its plumage is wholly white, with the exception of some feathers on the side of the back and on the wings, which are black. The bill, which is nearly eight inches long, and every other part of its body, are of a fine red colour.

2. The stork is a semi-domestic bird, haunting towns and cities; and in many places stalking unconcernedly about the streets, in search of offal and other food. It removes noxious filth, and clears the fields of serpents and reptiles. On this account it is protected in Holland, and is held in high veneration by the Muhammadans.

3. The disposition of the stork is mild and placid. It is easily tamed; and may be trained to reside in gardens, which it will clear of insects and reptiles.

4. It has a grave air and a mournful visage: yet, when roused by example, it exhibits a certain degree of

gayety; for, it joins in the frolics of children, hopping about and playing with them.

5. "In a garden (says Dr. Herrmann) where the children were playing at hide-and-seek, I saw a tame stork join the party; run in its turn when touched; and distinguish the child whose turn it was to pursue the rest so well, as, along with others, to be on its guard."

6. To the stork the ancients ascribed many of the moral virtues; as temperance, conjugal fidelity, and filial and paternal piety. The manners of this bird are such as were likely to attract peculiar attention.

7. It bestows much time and care on the education of its offspring, and does not leave them till they have strength sufficient for their own support and defence.

8. When they begin to flutter out of their own nest, the mother bears them on her wings; she protects them from danger, and will sometimes perish rather than forsake them.

9. A celebrated story is current in Holland, that, when the city of Delft was on fire, a female stork in vain attempted several times to carry off her young ones; and, finding she was unable to effect their escape, suffered herself to be burned with them.

10. The following anecdote affords a singular instance of sagacity in this bird. A wild stork was brought by a farmer, who resided near Hamburgh, into his poultry-yard, to be the companion of a tame one that he had long kept there; but the tame stork, disliking a rival, fell upon the poor stranger, and beat him so unmercifully that he was compelled to take wing, and with some difficulty escaped.

11. About four months afterwards however, he returned to the poultry-yard, recovered of his wounds, and

attended by three other storks, who no sooner alighted, than they all together fell upon the tame stork and killed him.

12. Storks are birds of passage, and observe great exactness in the time of their autumnal departure from Europe to more favourite climates. Before each of their migrations they meet in amazing numbers.

13. They are for a while much in motion among themselves; and, after making several short excursions, as if to try their wings, they suddenly take flight with great silence.

Lesson 38.—*The Gigantic Crane.*

1. The gigantic crane is an inhabitant of Bengal, and is sometimes found on the coast of Guinea.

2. Its aspect is filthy and disgusting; yet it is an extremely useful bird, in consequence of the snakes, noxious reptiles, and insects, which it devours.

3. It seems to finish the work that is begun by the jackal and vulture; as it clears away the bones by swallowing them entire.

4. They sometimes feed on fish; and one of them will devour as much as would serve four men for dinner.

5. On opening the body of a gigantic crane, there were found in its craw a land tortoise, ten inches long, and in its stomach a large black cat.

6. Being altogether undaunted at the sight of mankind, these birds are soon rendered familiar; and, when fish or other food are thrown to them, they catch them very nimbly, and immediately swallow them.

7. They are held in the highest veneration by both the Indians and Africans. Mr. Ives, in attempting to

kill some of them with his gun, missed his shot several times; this the by-standers observed with great satisfaction, telling him triumphantly that he might shoot at them as long as he pleased, but that he would never be able to kill any of them.

8. There seems no doubt that this is the species mentioned by Mr. Smeathman, as having been seen by him in Africa.

9. The birds that he describes were at least seven feet high, and appeared at a distance not unlike *gray-headed men.*

10. On the middle of the front of the neck there was a long conic membrane like a bladder, covered sparingly with short down, and rising and falling as the animals moved their beaks, but always appearing inflated.

11. A young bird of this kind, about five feet in height, was brought up tame, and presented to the chief of the Bananas, where Mr. Smeathman lived; and in whose house it soon became perfectly familiar.

12. It regularly attended the hall at dinner-time, and placed itself behind its master's chair frequently before any of the guests entered.

13. The servants were obliged to watch it carefully, and defend the provisions by beating it off with sticks; yet, notwithstanding every precaution, it would frequently snatch off something from the table.

14. It one day purloined a whole boiled fowl, which it swallowed in an instant.

15. This bird used to fly about the island, and roost very high among the silk-cotton trees: from this station, at the distance of two or three miles, it could see when the dinner was carried across the court.

16. As soon as this appeared it would dart down, and

arrive early enough to enter with some of those who carried in the dishes.

17. When sitting, it was observed always to rest itself on the whole length of the hind part of the legs.

18. It sometimes stood in the room for half an hour after dinner; turning its head alternately as if listening to the conversation.

19. The courage of this bird was not equal to its voracity; for, a child eight or ten years of age was able to put it to flight; though it would seem at first to stand on the defensive, by threatening with its enormous bill widely extended, and crying out with a loud hoarse voice.

20. It preyed on small quadrupeds, birds, and reptiles; and, though it would destroy poultry, it never dared openly to attack a hen with her young ones.

21. It had been known to swallow a cat whole; and a bone of a shin of beef, being broken, served it but for two morsels.

Lesson 39.—*The Peacock.*

1. If empire were claimed by beauty, and not by power, the peacock would without contradiction be the king of birds.

2. For elegance of form and brilliancy of plumage it is exceeded by none of the feathered race.

3. On the peacock it is that nature appears to have bestowed her treasures with the greatest profusion.

4. Its large size, imposing manner, firm tread, and noble figure; the rich crest upon its head, adorned with brilliant colours; its matchless plumage, appearing to combine everything that can delight the eye; all contend to place it high in our esteem.

5. These beautiful plumes, however, are shed every year.

6. At this period the bird seems humiliated; and searches the shades in order to conceal himself from our eyes, until a new spring restores to him his usual attire.

7. The brilliant train of the peacock is not its tail; the long feathers that form it do not grow from the rump, but upon the back.

8. A range of short, brown, stiff feathers, fixed upon the rump, is the real tail, and serves as a support to the train.

9. When the train is elevated, nothing appears of the bird in front, except its head and neck; but this would not be the case were those long feathers fixed only on the rump.

10. By a strong muscular vibration, these birds can make the shafts of their long feathers clatter together like the swords of a sword-dancer.

11. Peacocks are found wild in Asia and Africa; but the largest and finest of these birds are seen in the neighbourhood of the Ganges, and in the fervid plains of India.

12. It is the Mohr of the Mahrattas, according to Col. Sykes, who describes the wild bird as abundant in the dense woods of the Ghauts: on comparison, he found it to be identical with the bird domesticated in Europe.

13. The females lay only a few eggs at a time, and these at a distance usually of three or four days from each other.

14. When they are at liberty, and act from natural instinct, they always deposit their eggs in some sequestered or secret place. These are white and spotted, like the eggs of the turkey.

15. The incubation occupies from twenty-seven to thirty days, according to the temperature of the climate and of the season.

16. Peacocks are not able to fly well, but they climb, from branch to branch, to the tops of the highest trees.

17. From these, and from the roofs of houses, it is that they usually make their harsh and very peculiar cry.

18. In this cry, one note is deep and the other sharp, the latter exactly an octave above the former; and both have somewhat of the piercing sound of a trumpet.

Lesson 40.—*The Nightingale.*

1. The nightingale, though highly celebrated for the excellence of its song, is not remarkable for variety or richness of colours.

2. It is of a reddish brown in the upper part of the body, and a whitish gray in the throat, breast, and stomach.

3. It builds its nest with the dry leaves of trees, straw, and moss, at the bottom of hedges, where the bushes are thickest, and most perfectly concealed.

4. It begins to sing in the evening, and sometimes continues to do so for the whole night; the song is therefore more pleasant, on account of its being heard at an hour when all the rest are silent.

5. When all nature is hushed in silence, this inimitable songster fills the grove with a melody which seems to unite the excellencies of all other singing birds, and in effect far exceeds them.

6. He begins with a slow and gentle warbling, at first low and half pronounced, as though he were trying his powers.

7. By degrees his notes rise; he becomes more and more animated and loud, and displays such a combination of melody and powers, his notes are so various, so voluble, so soft, his tones sometimes so plaintive, gently dying away, at others so full, so animated and expressive, and the whole so varied and wonderfully combined, that it is impossible to conceive sounds more melodious or more interesting.

8. The pauses in his song produce a wonderful effect; they give us time to enjoy those sounds, whose impressions are still left upon the ear; we soon wish the song to be repeated, and soon we hear another combination of melody, as varied, and, though different, as pleasing as the former.

9. It is surprising that so powerful a voice should reside in so small a body, and that so diminutive a creature should possess all the melody which man has vainly endeavoured to produce from a variety of musical instruments.

10. Lungs so delicate as those of the nightingale, the motions of which are so violent, must be easily wounded; they have therefore the singular advantage of being fastened to the backbone by a number of little sinews.

11. The orifice of the windpipe is very large, which is certainly what contributes to the great variety of its sounds.

12. Nightingales are often heard to answer each other, as if competing with each other in singing, with much ardour: it has been said that, in such cases, the bird which is surpassed discontinues its song only with its life; but this is a fabulous story, without any foundation of truth.

Lesson 41 —*The Humming-Bird.*

1. Of all the birds that flutter in the garden, or paint the landscape, the humming-bird is the most delightful to look upon, and the most inoffensive.

2 Of this charming little animal there are six or seven varieties, from the size of a small wren down to that of an humble bee.

3 A European would not readily suppose that there existed any birds so very small, and yet so completely furnished with a bill, feathers, wings, intestines, exactly resembling those of the largest kind

4. Birds not so big as the end of one's little finger would probably be supposed mere creatures of imagination, were they not seen in infinite numbers, and as frequent as butterflies in a summer's day, sporting in the fields of America, from flower to flower, and extracting sweets with their little bill

5. The smallest humming-bird is about the size of a hazel-nut

6 The feathers on its wings and tail are black; but those on the body, and under its wings, are of a greenish brown, with a fine red cast or gloss, which no silk or velvet can imitate

7 It has a small crest on its head, green at the bottom, and as it were gilded at the top, which sparkles in the sun like a little star in the middle of its forehead.

8. The bill is black, straight, slender, and of the length of a small pin.

9. It is inconceivable how much these birds add to the high finishing and beauty of a rich luxurious western landscape.

10. As soon as the sun is risen, the humming-birds of different kinds are seen fluttering about the flowers, without ever alighting upon them.

11. Their wings are in such rapid motion that it is impossible to discern their colours, except by their glittering.

12. They are never still, but continually in motion, visiting flower after flower, and extracting its honey as if with a kiss.

13. For this purpose they are furnished with a forky tongue, that enters the cup of the flower, and extracts its nectared tribute. Upon this only they subsist.

14. The rapid motion of their wings occasions a humming sound, whence they have their name; for, whatever divides the air swiftly must produce a murmur.

LESSON 42.—*The Humming-Bird, (concluded.)*

1. The nests also of these birds are very curious. They are suspended in the air at the point of the twigs on an orange, a pomegranate, or a citron tree; sometimes even in houses, if a small and convenient twig is found for the purpose.

2. The female is the architect, while the male goes in quest of materials, such as cotton, fine moss, and the fibres of vegetables.

3. Of these materials a nest is composed, about the size of a hen's egg cut in two; it is admirably contrived, and warmly lined with cotton.

4. There are never more than two eggs found in the nest; these are about the size of a small pea, and as white as snow, with here and there a yellow speck.

5. The male and the female sit upon the nest by turns; but the female takes to herself the greatest share.

6. She seldom quits the nest, except a few minutes in the morning and evening, when the dew is upon the flowers, and their honey in perfection.

7. During this short interval the male takes her place. The time of incubation continues twelve days; at the end of which the young ones appear, much about the size of a bluebottle fly. They are at first bare; by degrees they are covered with down; and at last feathers succeed, but less beautiful at first than those of the old ones.

8. Father Labat, in his account of the mission to America, says, "that his companion found the nest of a humming-bird in a shed near the dwelling-house, and took it in, at a time when the young ones were about fifteen or twenty days old.

9. "He placed them in a cage at his chamber window, to be amused by their sportive flutterings; but he was much surprised to see the old ones, which came and fed their brood regularly every hour in the day.

10. "By this means they themselves grew so tame, that they seldom quitted the chamber; and, without any constraint, came to live with their young ones.

11. "All four frequently perched upon their master's hand, chirping, as if they had been at liberty abroad. He fed them with a very fine clear paste, made of wine, biscuit, and sugar.

12. "They thrust their tongues into this paste till they were satisfied, and then fluttered and chirped about the room.

13. "I never beheld anything more agreeable," continues he, "than this lovely little family, which had possession of my companion's chamber, and flew in and out

just as they thought proper; but were ever attentive to the voice of their master when he called them.

14. "In this manner they lived with him about six months; but, at a time when he expected to see a new colony formed, he unfortunately forgot to tie up their cage to the ceiling at night, to preserve them from the rats; and he found in the morning, to his great mortification, that they were all devoured."

LESSON 13.—*The Whale.*

1. The bulk of these animals is generally enormous, and their muscular powers are so great, that a blow of their horizontal tail is at any time sufficient to upset a boat; and, when struck upon the surface of the ocean, it makes the water fly with tremendous noise in all directions. They are able to spout water from the spiracles on their head, to a great height.

2. This animal employs the tail alone to advance itself in the water; and the force and quickness with which so enormous a body cuts its way through the ocean are truly astonishing.

3. A track is frequently made in the water like what would be left by a large ship; this is called his wake, and by this the animal is often followed. His fins are only applied in turning, and giving a direction to the velocity impressed by the tail.

4. The usual rate at which whales swim seldom however exceeds four miles an hour. When alarmed, their extreme velocity is eight or nine miles an hour, but this seldom continues more than a few minutes at a time.

5. These animals sometimes ascend to the surface with so much velocity as to leap entirely out of the water.

6. Sometimes they throw themselves into a perpendicular posture, with their heads downward; and, rearing their tails on high in the air, they beat the water with awful violence.

7. In both these cases, the sea is thrown into a foam, and the air filled with vapours. Sometimes the whale shakes its tremendous tail in the air, and makes with it a cracking noise, which is heard at the distance of two or three miles.

8. When a whale sinks from the surface of the water into the deep, at first lifts its head, then, plunging beneath the waves, raises its back like the segment of a sphere, deliberately rounds it away toward the extremity, throws its tail out of the water, and then disappears.

9. These whales are shy and timid animals, furnished with no weapons, either of offence or defence, except their tail.

10. As soon as they perceive the approach of a boat, they generally plunge under water, and sink into the deep; but, when they find themselves in danger, they exhibit their great and surprising strength.

11. In these cases they break to pieces whatever comes in the way; and, if they run foul of a boat, they dash it to atoms.

12. Whales have no voice; but, in breathing or blowing through their spiracles, they make a very loud noise.

13. The water which they discharge is spouted to the height of several yards, and at a distance appears like a puff of smoke.

14. When these animals are undisturbed, they usually remain on the surface of the water about two minutes

at a time, during which they breathe eight or nine times, and then descend for an interval of five or ten minutes, or, when feeding, fifteen or twenty.

15. The depth to which they usually descend is not very great; but, when struck with a harpoon, they sometimes draw out from the boats, in a perpendicular descent, as much line as would measure an English mile.

16. When the whale feeds, it swims with considerable velocity below the surface of the sea, with its jaws widely extended.

17. A stream of water consequently enters its capacious mouth, and along with it immense quantities of cuttlefish, sea-blubber, shrimps, and other small marine animals.

18. The water escapes at the side; but the food is entangled, and as it were sifted by the whalebone within the mouth.

19. The fidelity of the male and female to each other exceeds that of most animals. Some fishermen, as Anderson, in his history of Greenland, informs us, having struck one of two whales, a male and female, that were in company together, the wounded animal made a long and terrible resistance: with a single blow of its tail it upset a boat containing three men, by which all went to the bottom.

20. The other still attended its companion, and lent it every assistance, till at last the animal that was struck sank under the number of its wounds, while its faithful associate, disdaining to survive the loss, stretched itself upon the dead whale and shared its fate.

LESSON 44.—*The Whale (concluded.)*

1. To the Greenlanders, as well as to the natives of southern climates, the whale is an animal of essential importance; and these people spend much time in fishing for it.

2. When they set out on their whale-catching expeditions, they dress themselves in their best apparel, fancying that the whale detests a slovenly and dirty garb, and that, if they are not cleanly and neatly clad, it would immediately avoid them.

3. In this manner about fifty persons, men and women, set out together in one of their large boats. The women carry along with them their needles and other implements, to mend their husbands' clothes in case they should be torn, and tools to repair the boat, if it happen to receive any damage. When these men discover a whale, they strike it with their harpoons, to which are fastened lines or straps two or three fathoms long, made of seal-skin, having at the end a bag of a whole seal-skin blown up.

4. The huge animal, by means of the inflated bag, is in some degree compelled to keep near the surface of the water: when he is fatigued and rises, the men attack him with their spears till he is killed.

5. They now put on their *spring-jackets*, (made all in one piece of a dressed seal's skin,) with their boots, gloves, and caps, which are laced so tightly to each other that no water can penetrate them.

6. In this garb they plunge into the sea, and begin to slice off the fat all round the animal's body, even from those parts that are under water; for, their jackets being full of air, the men do not sink; and they have means of keeping themselves upright in the sea.

7. They have sometimes been known so daring as to mount on the whale's back while he was still alive, and kill him from thence.

8. The English send out with every ship six or seven boats: each of these has one harpooner, one man at the rudder, one to manage the line, and four seamen as rowers. In each boat there are also two or three harpoons, several lances, and six lines, each a hundred and twenty fathoms long, fastened together.

9. As soon as a whale is struck with the harpoon, he darts down into the deep, carrying off the instrument in his body; and so extremely rapid is his motion, that if the line were to entangle, it would either snap like a thread or overset the boat.

10. One man therefore is stationed to attend only to the line, that it may go regularly out; and another is employed in continually wetting the place it runs against, that the wood may not take fire from the friction.

11. When the whale returns to breathe, the harpooner inflicts a fresh wound, till at length the immense animal faints from loss of blood. The men now venture to row the boat quite up to him: and a long steeled lance is thrust into his breast, and through the intestines, which soon puts an end to his existence.

12. The carcass no sooner begins to float, than holes are cut in the loins and tail, and, ropes being fastened to these, it is towed to the ship, where it is fastened in such a manner that the back floats in the water.

13. The operation next to be performed is that of taking out the blubber and whalebone. Several men get upon the animal with a sort of iron spurs, (to prevent them from slipping,) and separate the tail, which is hoisted on deck: they then cut out square pieces of

blubber, weighing two or three thousand pounds each; which are also hoisted up.

14. These are here cut into smaller pieces, which are thrown into the hold, and left for three or four days to drain.

15. When all the blubber is out from the belly of the whale, it is turned on one side, by means of a piece of blubber left in the middle, called the cant, or turning piece.

16. The men then cut out the side in large pieces, as before, and also the whalebone, with the gums, which are preserved entire, and hoisted on deck, when the blades are cut and separated, and left till the men have time to scrape and clean them.

17. The whale is next turned with its back upwards, and the blubber is cut from the back crown bone. The men conclude the whole process by cutting the blubber from the other side.

18. But before letting the remainder of the body float away, they cut out the two large upper jaw bones, which, being hoisted on deck, are cleansed, and fastened to the shrouds, and tubs are placed under them to receive the oil which they discharge. This oil, by the custom of the trade, is a perquisite belonging to the captain.

19. In three or four days the seamen hoist the pieces of blubber out of the hold, chop them, and put them, by small pieces into casks through the bung-holes.

LESSON 45.—*The Flying Fish.*

1. The wings, as they are usually called, with which these fish have the power of raising themselves into the air, are nothing more than large pectoral fins,

composed of seven or eight ribs or rays, connected by a flexible, transparent, and glutinous membrane.

2. They have their origin near the gills, and are capable of considerable motion backward and forward.

3. These fins are used also to aid the progress of the fish in the water.

4. All fish live upon each other in some state of their existence. Those with the largest mouths attack and devour the large kinds; those whose mouths are less lie in wait for the smaller fry.

5. Among these the dorado is one of the most voracious, and the great enemy of the flying fish. Nature has furnished each of these creatures respectively with the powers of pursuit and escape.

6. The dorado, being above six feet long, yet not thicker than a salmon, and furnished with a full complement of fins, cuts its way through the water with amazing rapidity: on the other hand, the flying fish is furnished with two pair of fins longer than the body, and these also moved by a stronger set of muscles than any other.

7. This equality of power seems to furnish one of the most curious spectacles the sea can exhibit. The efforts to seize on the one side, and the arts of escaping on the other, are quite extraordinary.

8. The dorado is seen upon this occasion darting after its prey, which will not leave the water while it has the advantage of swimming, in the beginning of the chase.

9. But, like a hunted hare, being tired at last, it then has recourse to another expedient for safety, by flight.

10. The long fins, which began to grow useless in the water, are now exerted in a different manner and dif-

ferent direction to that in which they were employed in swimming: by this means the timid little animal rises from the water, and flutters over its surface for two or three hundred yards, till the muscles employed in moving the wings are enfeebled by that particular manner of exertion.

11. By this time however they have acquired a fresh power of renewing their efforts in the water, and the animal is capable of proceeding with some velocity by swimming: still however the active enemy keeps it in view, and drives it again from the deep; till at length the poor little creature is seen to dart to shorter distances, to flutter with greater effort, and to drop down at last into the mouth of his fierce pursuer.

12. But not the dorado alone, all animated nature seems combined against this little fish, which seems possessed of double powers only to be subject to greater dangers.

13. For, though it should escape from its enemies of the deep, yet the tropic bird and the albatross are for ever upon the wing to seize it.

14. Thus pursued in either element, it sometimes seeks refuge from a new enemy; and it is not unfrequent for whole shoals of them to fall on shipboard, where they furnish man with an object of curiosity.

Lesson 46.—*The Gold-Fish.*

1. Gold-fish are natives of China, where they are kept in ponds, or large porcelain vessels, by almost every person of distinction.

2. In these they are very lively and active, sporting about the surface of the water with great vivacity; but they are so delicate that, if cannon are fired, or any

substance giving out a powerful smell, as pitch or tar, is burned near them, great numbers will be killed.

3. In each of the ponds or basins where they are kept, there is an earthen pan, with holes in it, turned upside down.

4. Under this they retire, when at any time they find the rays of the sun too powerful. The water is changed three or four times a week.

5. Whilst this is done, it is necessary to remove the fish into another vessel; but they ought always to be taken out by means of a net, for, the least handling would destroy them.

6. When gold-fish are kept in ponds, they are often taught to rise to the surface of the water at the sound of a bell, to be fed.

7. At Pekin, for three or four months of the winter, or whilst the cold weather lasts, the fish in the ponds are not fed at all. They are able, during that time, to obtain the small quantity of food which they require from the water.

8. In order to prevent their being frozen, they are often taken into the houses, and kept in China vessels, till the warm weather of spring allows of their being returned to their ponds with safety.

9. In hot countries, gold-fish multiply very fast, if care be taken to remove the spawn, which swims on the surface of the water, into other ponds; for otherwise the animals would devour the greater part of it.

10. The young fry, when first produced, are perfectly black; but they afterwards change to white, and then to a gold colour.

11. The latter colours appear first about the tail, and extend upwards.

12. The smallest fishes are preferred, not only from their being more beautiful than the larger ones, but because a greater number of them can be kept.

13. These are of a fine orange red colour, appearing as if sprinkled over with gold dust. Some however are white like silver, and others white spotted with red.

14. When dead they lose all their lustre. The females are known from the males by several white spots which they have near the gills and the pectoral fins: the males have these parts very bright and shining.

Lesson 47.—*The Land Crab.*

1. Land crabs are natives of the Bahamas, and most of the other islands between the tropics. They measure between five and six inches across the body, and are of various colours; some are entirely black; others yellow or red, and others variegated; but they are commonly of a blackish violet colour.

2. They live in the clefts of rocks, the hollows of trees, or in holes which they dig for themselves in the mountains.

3. About the months of April and May in every year, they descend in a body of some millions at a time to the sea coast, to deposit their spawn; and at this season the whole ground seems alive with them.

4. They march in a direct line to their place of destination, and are said seldom to turn out of their way on account of intervening obstacles. Even if they encounter a lofty wall, or a house, they will attempt to scale it. If they arrive at a river, they wind along the course of the stream.

5. They are as regular in their procession as an army

under the direction of an experienced commander, being generally divided into three battalions.

6. The first of these consists of the strongest males, which march forward to clear the route and face the greatest dangers.

7. The main body is composed of females, which are sometimes formed into columns, fifty or sixty yards broad, and three miles deep.

8. The first division is often obliged to halt from want of rain, and the females never come from the mountains until the rains have set in for some time.

9. Three or four days after these, the rear-guard follows; a straggling disciplined tribe, consisting of males and females, but neither so robust nor so vigorous as the former.

10. They proceed chiefly in the night; but, if it rain during the day, they always profit by it. When the sun is hot, they invariably halt till the evening.

11. When terrified, they run in a confused and disorderly manner, holding up and clattering their nippers with a threatening attitude: and, if they be suffered to catch hold of the hand, they will sometimes tear off a piece of the skin.

12. If in their journey any one of their body be so maimed as to be incapable of proceeding, some of the others always fall upon and devour it.

13. They march very slowly, being sometimes three months or upwards in gaining the shore.

14. When arrived at the coast, they prepare to cast their spawn: for this purpose they go to the edge of the water, and suffer the waves to wash twice or thrice over their bodies.

15. They then withdraw, in order to seek a lodging

upon land. In the meantime the spawn is extruded in a bunch from the body, and adheres to the under parts of the tail.

16. This bunch becomes as large as a hen's egg, and exactly resembles the roe of a herring. In this state they again, for the last time, seek the shore, and, shaking off the spawn into the water, leave it to the heat of the sun to be brought to maturity.

17. About two thirds of the eggs are devoured by the fish which annually frequent the shores in expectation of this prey.

18. Those that escape are hatched under the sand; and, not long after this, millions of the little crabs may be seen quitting the shore, and slowly travelling toward the mountains.

19. The old ones, in their return, are feeble, lean, and inactive, so that they are scarcely able to crawl along; and their flesh at this time changes its colour.

20. Many of them are obliged to continue in the level parts of the country till they recover, making holes in the earth, which they block up with leaves and dirt.

21. In these they cast their old shells, and continue nearly motionless for six or seven days, when they become so fat as to be delicious food. After this, they march slowly back to the mountains.

Lesson 48.—*The Polype.*

1. Polypes are gelatinous animals, which consist of a long tubular body fixed at the base, and surrounded at the mouth by arms or tentacula.

2. They are chiefly inhabitants of fresh water, and are among the most wonderful productions of nature. The

common or long-armed polype is about an inch in length, of yellowish gray colour, and has about seven tentacula longer than the body.

3. The green polype (so called from its colour) is furnished usually with eight tentacula, which are shorter than the body: like the preceding animal, it has the power of contracting its body in a very sudden manner, when disturbed, so as to appear only like a small green or brownish lump.

4. These two kinds will fully illustrate the nature of the whole tribe. They fasten themselves to the under parts of leaves, and to the stalks of such vegetables as happen to grow immersed in the same water; and they feed on the various species of small worms and other aquatic animals that happen to approach.

5. When any animal of this kind passes near a polype, the polype suddenly catches it with its arms, and, dragging it to its mouth, swallows it by degrees, much in the same manner as a snake swallows a frog.

6. Two polypes may occasionally be seen in the act of seizing the same worm at different ends, and dragging it in opposite directions with great force.

7. It sometimes happens, while one is swallowing its respective end, the other is also employed in the same manner; and thus they continue swallowing, each his part, until their mouths meet.

8. They then rest for some time in this situation, till the worm breaks between them; and each goes off with his share.

9. But, when the mouths of both are thus joined together upon one common prey, a more dangerous combat now and then ensues.

10. The largest polype gapes and swallows his anta-

gonist; but, what is extremely wonderful, the animal thus swallowed seems to be a gainer by the misfortune.

11. After it has lain in the conqueror's body for about an hour, it issues unhurt, and often in possession of the prey that had been the original cause of contention.

12. The remains of the animal on which the polype feeds are evacuated at the mouth, the only opening in the body. The polype is capable of swallowing a worm thrice its own size: this, though it may at first appear incredible, is easily understood, when we consider that the body of the polype is extremely extensile, and is dilated on such occasions to a surprising degree.

13. The species are multiplied, for the most part, by a kind of vegetation, one or two, or even more young ones emerging gradually from the sides of the parent animal; and these young ones are frequently again prolific before they drop off; so that it is no uncommon thing to see two or three generations at once on the same polype.

14. But the most astonishing particular respecting this animal is that, if a polype be cut in pieces it is not destroyed, but it is multiplied by dissection: it is thus literally

Rich from its loss, and fruitful from its wound.

15. It may be cut in every direction that fancy can suggest, and even into very minute divisions, and not only the parent stock will remain uninjured, but every section will become an animal.

16. Even when turned inside out, it suffers no material injury; for, in this state, it will soon begin to take food, and to perform all its other natural functions.

17. M. Trembley, of Geneva, ascertained that different portions of one polype could be engrafted on another.

18. Two transverse sections brought into contact will quickly unite and form one animal, though each section belong to a different species.

19. The head of one species may be engrafted on the body of another. When one polype is introduced by the tail into another's body, the two heads unite, and form one individual.

20. Pursuing these strange operations, M. Trembley gave scope to his fancy, and, by repeatedly splitting the head and part of the body, he formed hydras more complicated than ever struck the imagination of the most romantic fabulists.

21. These creatures continue active during the greatest part of the year; and it is only when the cold is most intense that they feel the general torpor of nature.

22. All their faculties are then, for two or three months, suspended. But, if they abstain at one time, they make ample amends in their voracity at another; and, like all those animals which become torpid in winter, the meal of one day suffices them for several months.

Lesson 49.—*The Metamorphoses of Insects.*

1. All winged insects undergo three metamorphoses, or changes of form; and these distinct periods present very different scenes to the student of nature.

2. In the first period the insect appears as a worm or caterpillar. Its body is long, cylindrical, and consists of a succession of rings, which are generally cased within each other.

3. By the aid of its rings, or of several pairs of legs, it crawls about in quest of food; and its movements are in some species remarkably quick. Its head is armed

with teeth or pincers, by which it eats the leaves of plants, or other kinds of food.

4. Its blood moves from the tail towards the head; and it breathes, either by small openings placed on each side of its body, or by one or several tubes situated on its posterior part, which resembles so many tails.

5. In the second period, the insect appears under the form of a nymph or chrysalis.

6. When an insect, after throwing off the skin of the caterpillar, exhibits all its external parts, only covered with soft and transparent membranes, it is called a nymph; but, when to these membranes is added a common and crustaceous covering, it receives the name of a chrysalis.

7. While in this second state, insects in general are totally inactive, and seem not to possess any powers of life; remaining fixed in the situation which they have chosen for their temporary abode, till their final metamorphosis into flies. Some however are capable of changing place, but their movements are slow and painful.

8. The blood circulates now from the head to the tail, and the organs of breathing are found on the anterior part of the animal.

9. In the third period, as a butterfly or moth, the insect has acquired that perfect construction which corresponds to the rank it is destined to hold in the scale of existence.

10. The bonds of the nymph or the chrysalis are now burst asunder, and the insect commences a new mode of life. All its members, formerly soft, inactive, and folded up, are expanded, strengthened, and exposed to observation.

11. Under the form of a worm or caterpillar, it crawl-

ed; and, under that of a nymph or chrysalis, its power of motion was almost annihilated; but under this last form, it is furnished with six springy legs, and two or four wings with which it is enabled to fly through the air.

12. Instead of teeth or pincers, with which it divided gross aliment, it has now a trunk, by which it extracts the refined juices of the most delicate flowers; and it delights us by the beauty of its spots, and the variety of its colours.

LESSON 50.—*The Bee.*

1. On examining the structure of the common working bee, the first remarkable part is the trunk, which serves to extract the honey from flowers. It is not formed, like that of other flies, in the manner of a tube, by which the fluid is to be sucked up; but like a besom to sweep, or a tongue to lick it away.

2. The animal is furnished also with teeth, which serve it in making wax, which also is gathered from flowers like honey. In the thighs of the hind legs there are two cavities; and into these, as into a basket, the animal sticks its pellets.

3. Thus furnished, the bee flies from flower to flower, increasing its store, and adding to its stock of wax, until the ball upon each thigh becomes as big as a grain of pepper: by this time, having got a sufficient load, it returns, making the best of its way to the hive.

4. The belly of the bee is divided into six rings, which sometimes shorten the body by slipping one over the other. It contains within it, beside the intestines, the honey-bag, the venom-bag, and the sting.

5. The honey-bag is as transparent as crystal, containing the honey that the bee has brushed from the

flowers; of which the greater part is carried to the hive, and poured into the cells of the honeycomb, while the remainder serves for the bee's own nourishment; for, during summer, it never touches what has been laid up for the winter.

6. The sting, which serves to defend this little animal from its enemies, is composed of three parts; the sheath, and two darts which are extremely small and penetrating.

7. Both the darts have several small points or barbs, like those of a fishhook, which render the sting more painful, and make the dart rankle in the wound. Still, however, this instrument would be very slight, did not the bee poison the wound. The sheath, which has a sharp point, makes the first impression, which is followed by that of the darts, and then the venomous liquor is poured in.

8. The sheath sometimes sticks so fast in the wound, that the animal is obliged to leave it behind; by which the bee soon after dies, and the wound is considerably inflamed.

9. To superficial observers, it might at first appear well for mankind if the bee were without its sting; but, upon recollection, it will be found that the little animal would then have too many rivals in sharing its labours.

10. A hundred other lazy animals, fond of honey, and hating labour, would intrude upon the sweets of the hive; and the sweet treasure would be carried off, for want of armed guardians to protect it.

11. The bee is furnished with a stomach for its wax as well as its honey. In the former the powder it collects from flowers is altered, digested, and concocted into real wax, and is thus ejected by the same passage by which it was swallowed.

12. Besides the wax thus digested, there is a large portion of the powder kneaded up for food in every hive, and kept in separate cells for winter provision. This is called by country people bee-bread, and contributes to the health and strength of the animal during winter.

LESSON 51.—*The Labour of the Bee.*

1. The bee is an animal not only subject to laws, but active, vigilant, laborious, and disinterested. All its provisions are laid up for the community; and all its arts in building a cell designed for the benefit of posterity.

2. The substance with which bees build their cells is wax, which is fashioned into convenient apartments for themselves and their young.

3. When they begin to work in their hives, they divide themselves into four companies; one of which roves the fields in search of materials; another employs itself in laying out the bottom and the partitions of their cells; a third is employed in making the insides smooth from the corners and angles; and the fourth company bring food for the rest, or relieve those who return with their respective burdens.

4. The bees often change the task assigned them; those that have been at work being permitted to go abroad, and those that have been in the fields take their places.

5. They seem even to have signs by which they understand each other; for, when any of them wants food, it bends down its trunk to the bee from whom it is expected, which then opens its honey-bag, and lets some drops fall into the other's mouth.

6. Their diligence and labour are so great, that, in a day's time, they are able to make cells, which lie upon each other numerous enough to contain three thousand bees.

7. The cells of bees are perfect hexagonal prisms, and formed in the exactest proportion: those in every honeycomb are double, opening on either side, and closed at the bottom. The bottoms are composed of little triangular panes, which when united together terminate in a point, and lie exactly upon the extremities of other panes of the same shape in opposite cells.

8. The proportions of these cells have been very carefully measured; and learned men have proved that their shape is exactly what it ought to be, to hold the greatest possible quantity of honey. If the same quantity of wax were moulded by the bees into cells of any other shape, the room in them would be less than it is.

9. These lodgings have spaces like streets between them, large enough to give the bees free passage in and out, and yet narrow enough to preserve the necessary heat.

10. The mouth of every cell is defended by a border, which makes the door a little less than the inside of the cell, and serves to strengthen the whole.

11. If examined through a glass hive, from the hurry the swarm is in, the whole at first appears like anarchy and confusion; but the spectator soon finds every animal diligently employed, and following one pursuit with a settled purpose.

12. They begin at the top of the hive, and several of them work at a time at the cells, which have two faces. If they are stinted with regard to time, they give the new cells but half the depth which they ought to have, leaving them imperfect till they have sketched out the number of cells necessary for the present occasion.

13. The construction of their combs costs them a great deal of labour: they are made by insensible addi-

tions, and not cast at once in a mould. There seems no end of their shaping, finishing, and turning them neatly up.

14. The cells for their young are most carefully formed: those designed for lodging the drones are larger than the rest; and that for the queen bee the largest of all.

Lesson 52.—*Butterflies and Moths.*

1. The number of these beautiful animals is very great; for though, some years ago, more than seven hundred and sixty different kinds were enumerated, the list is still thought to be incomplete.

2. The wings of butterflies sufficiently distinguish them from flies of every other species: they are four in number, and owe their opacity to the brilliant dust with which they are covered.

3. Nothing can exceed the beauty and regularity of these little particles, when closely inspected with a glass. They seem arranged somewhat like the tiles of a house: they are of different shapes, and those in one row are a little concealed by those of another.

4. The wing itself is composed of several thick nerves, which give it additional strength, without encumbering it much with weight; and, though it is covered over with thousands of the coloured scales or studs, it still remains light.

5. The butterfly easily supports itself in the air for a considerable time, although its flight cannot be considered as graceful.

6. In some butterflies the eyes are small, in others they are large; but in all of them the outer coat has a lustre exhibiting all the colours of the rainbow. If carefully examined, it will be found to have a great number of sides or facets, resembling those of a cut diamond.

7. These animals, like most other flying insects, have two feelers attached to their heads: they are moveable at their base, and have a great number of joints, by which means they can be turned in any direction.

8. What the use of the feelers may be, which are so wonderfully formed, and by a workman who does nothing without reason, is at present but little understood.

9. We are not so ignorant of the purposes to which the trunk is applied: it is placed exactly between the eyes, and is rolled up when the animal is not in pursuit of its food.

10. When the butterfly settles upon a flower, the trunk is uncurled, and is employed in searching the flower to the very bottom, though its depth may be considerable. The search being repeated seven or eight times, the insect passes to another flower, and hovers over those which are agreeable to it.

LESSON 53.—*The Butterflies and Moths, (concluded.)*

1. It is not by day alone that these beautiful insects wantonly flutter from flower to flower; for the greater number of them make their excursions at night, and expand their brilliant colouring when there is no spectator.

2. This tribe has therefore been distinguished into diurnal and nocturnal flies, or into butterflies and moths: the shape of the feelers or horns also furnishes another distinction; those of the butterfly being clubbed, or knobbed at the end; those of the moth tapering finer and finer to a point.

3. Both these kinds pass the short period assigned for their existence in a variety of enjoyments; the principal part of their time is devoted to the procuring of food, which is produced in such plenty by almost every flower,

or to the pursuit of a companion, whose approach it is believed that they can perceive at the distance of more than two miles.

4. Their sagacity in this respect is astonishing; but by what sense they are capable of perceiving each other it is difficult to decide: certain it is that the male, after having fluttered about for some time, is occasionally seen to take wing in a direct line to the flower on which his mate is perched.

5. As it generally happens among insects, the body of the female is thick and oval; while that of the male is smaller and more slender.

6. The females of many moths appear to have gained the power of flying for no other purpose than to lay their eggs and fecundate them: they are not seen fluttering about in quest of food, but, after depositing their eggs, they die without taking any nourishment.

7. The shell of the egg is thin and transparent; and, as the caterpillar within increases in size, the colours undergo a change.

8. Each egg contains a single caterpillar; and, as it is necessary that the insect when excluded should be near its provision, the butterfly is careful to fix her brood upon those plants which afford them most nourishment.

9. They select for their young a very different kind of food from that on which they themselves subsist, and therefore deposit their eggs on very unsavoury plants, as the rag-weed, the cabbage, or the nettle: every butterfly chooses the vegetable on which it fed while in the form of a caterpillar.

10. The eggs are attached to the leaves by a kind of glue, and remain unobserved unless carefully looked for.

11. When the eggs have been sufficiently warmed,

the little creatures come forth in the state of caterpillars, to become aurelias and butterflies, and in this manner to continue the round of nature.

Lesson 54.—*The Lion-ant.*

1. This creature has a somewhat long head and roundish body, which becomes a little narrow towards the tail. It has six feet, four fixed to the breast and two to the neck.

2. The head is small and flat; and in front there are two small horns and feelers, which are about a quarter of an inch long and crooked at the ends: there are also two little black eyes, by which it is able to perceive the smallest objects, as is easily apparent by its starting at everything that comes near it.

3. Although so ill adapted by its form for a rapacious life, this creature is endowed by nature with the most ravenous appetite. It has legs indeed, but they only enable it to run backwards, so that its prey must come to it, or fall into its snare, or the insidious assassin must starve.

4. But to compensate for its other deficiencies, nature has given it an equivalent in cunning, so that no animal fares better than this, although it never quits its retreat.

5. It selects a dry sandy place under some shelter, so as to avoid the rain. In digging a hole for the reception of its prey, it begins to carve with the hinder part of its body, which is pointed, and thus works backwards.

6. It forms a circular furrow, which shows the limits of the hole it intends to make. It makes several other furrows within the first, and then commences the digging of the hole, by throwing up the sand towards the edges of the pit with its horns or feelers, nearly in the same manner as men throw up sand in a gravel-pit.

7. When this insect first quits its egg, the pit which it makes is very small; but, as it grows bigger, it makes a larger hole, serving like a pit-fall to ensure its prey. The common dimensions of this pit are about two inches in depth, and as much in breadth.

8. Thus prepared, the insidious insect conceals itself at the bottom, under the sand, in such a manner that its two horns surround the lower part of the pit.

LESSON 55.—*The Lion-ant, (concluded.)*

1. Aware that scarcely any insect which once enters can escape from the pit-fall, the lion-ant remains in expectation, prepared to take advantage of any accident that may throw some heedless little creature into his den.

2. Should an ant, a woodlouse, or a caterpillar, unfortunately go too near the edge of the precipice, the sand gives way beneath them, and they fall into the pit, where inevitable destruction instantly awaits them.

3. The least portion of sand by its fall advertises the murderer of the approach of something, and accordingly it is always ready to seize upon its prey. But, if it should happen that the ant or woodlouse runs up the sides of the pit-fall, before the other is prepared to seize it, the lion-ant has another contrivance, still more curious than the former.

4. By means of its head and feelers, it throws up a shower of sand, which falls upon the struggling fugitive with tremendous weight, and once more precipitates it to the bottom.

5. The lion-ant now seizes it with its feelers, which are hollow, and, darting them both into its body, sucks out the little animal's juices with the utmost rapacity.

6. When nothing but the external skin remains, the next object of the murderer is to remove the husk from

its cell, as the appearance of dead carcasses might forewarn other insects of the danger of the place.

7. The lion-ant therefore, by means of its feelers, throws the wasted trunk at least six inches from the side of its hole; and then carefully begins to repair the breaches before made in its fortifications.

8. It will continue to work with wonderful industry, for a week together, at making its pit-fall; with equal vigilance it will watch for more than a month in patient expectation of its prey; and, when it comes in greater numbers than is necessary, the voracious little creature will still quit the insect it has just killed to attack any other that may fall within the reach of its malignity.

Lesson 56.—*The Spider.*

1. This is an insect which is entitled to particular notice. With the most various instincts, it is formed for a life of rapacity; and, as it preys entirely on other insects, all its actions have for their object to deceive and surprise.

2. It displays great ingenuity in contriving its web for entangling its prey: it is possessed of patience and assiduity to wait for, and of arms and strength to destroy, the animals which constitute its food.

3. Spiders have two distinct parts in their bodies; a fore part, containing the head and breasts, and covered with a hard shell, as well as the legs, which are joined to the breast; a hinder part, over which a supple skin is spread, also covered with hair.

4. Their eyes are sometimes six, and sometimes eight in number; extremely brilliant and sharp, and placed round the head; two behind, two before, and the rest on each side.

5. These eyes, as in all other insects, are immoveable, and without eyelids; and, as the animal procures its subsistence by the most unremitting watchfulness, so many of them are necessary to convey the earliest information of the capture of its prey.

6. They have two pincers on the fore part of the head formed at their extremities, in the same manner as the claws of a cat: at a short distance from the claw there is a small hole, from which the creature sometimes emits a poison, one of the most powerful weapons they employ against their enemies, as it instantly destroys them.

7. Spiders have eight legs, which are jointed like those of a lobster, and capable of being renewed, if either the whole leg or one of its joints should be accidentally torn off.

8. Three crooked claws grow from the end of each leg: one of these is small like a cock's spur, and is used for the purpose of attaching the insect to its web; the other two meet together so as to form a claw, with which the animal, by taking hold of the little eminences that occur in most even bodies, is enabled to walk over them in any direction.

9. In addition to this contrivance, the spider is also furnished with a sticky substance, contained in a kind of sponge, growing near the extremity of the claw.

10. In walking over a substance that is perfectly smooth, like a mirror or polished piece of marble, the spider, by squeezing the sponge, expels a portion of this glutinous matter, by which means it adheres to the glass till it takes another step.

11. Besides the eight legs just mentioned, this animal has also two arms, which it uses for the purpose of holding its prey.

LESSON 57.—*The Spider, (continued.)*

1. But, though spiders are thus formidably equipped, they would seldom obtain a sufficient supply of prey for their sustenance, if they were not furnished with some other means of aiding their depredations.

2. As they live wholly on flies, and are without wings to pursue them, it is clear that they would often be in want of food, unless they had some mode of entrapping their prey. This purpose is effected by means of a web, which the spider spreads to catch those animals it is unable to pursue.

3. The web is spun in those places most frequented by flies, as the corners of rooms, the edges of windows, or the open air among the branches of the trees. In such situations the spider remains, an example of great patience, for days, or even weeks together; and seldom changes its situation though it may not be very successful.

4. In order to furnish materials for the web, this animal is provided with great quantities of glutinous matter within its body, and five apertures through which it can be spun into thread.

5. This substance is contained in a little bag, and appears to resemble soft glue; but, on a more accurate examination, it is found to be twisted into coils, and to be capable of being drawn out into many threads.

6. The threads, though so fine in appearance, are composed of five others joined together, and these are again many times doubled when the web is completely formed.

7. For the purpose of forming the web, a spider first selects a convenient situation, to which it is invited by a prospect of plunder and security. The animal then causes a drop of its glutinous liquor to distil from the

extremity of its claw; and from the tenacity of the liquid it is enabled to creep up the wall.

8. In this situation the spider commences its operations, by darting from the wall to the opposite place, where the other end of the web is to be fastened.

9. In this manner the first thread is formed; and, after having drawn it tight, the spider runs upon it backwards and forwards, for the purpose of giving it a sufficient degree of strength; as upon the security of this the stability of the whole depends.

10. When the main-stay is thus completed, a number of threads are drawn parallel to the first; and these are crossed by others, so as to form a complete network.

LESSON 58.—*The Spider, (continued)*

1. The insect, after this operation, doubles and trebles the thread on the edges of the web, in order to prevent the wind from blowing away the whole fabric. The next object of the spider is the contrivance of a retreat.

2. This is generally formed at the under part of the web in the shape of a funnel. It has two apertures, one above, another below, so as to enable the animal to make excursions, and to pry into every corner where it is likely to meet with insects upon which it can feast.

3. But, still attentive to the web, the spider removes the dust that gathers round it, by striking the web, so as to shake but not to endanger the fabric.

4. From the main part of the web, several threads sometimes extend on every side. these may be considered as the outworks of the fortification; and, whenever they are touched by other insects, the spider is informed to prepare either for an attack or for defence.

5. If a fly thus causes the threads to vibrate, the

spider commences his onset with agility; but, on the contrary, if an insect superior in power to the spider appears, the latter prudently avoids the combat.

6. Another purpose of the spider's retreat, is that of affording him a place in which he can feast upon his prey in comfort and security, at the same time that no alarm is given to the neighbouring insects by the appearance of such fragments of others as remain undevoured.

7. But, though the spider is possessed of numerous advantages for entrapping and preying upon other insects, yet he is subject to the danger of having the result of his labours instantly destroyed, either by the violence of the wind, or the approach of some large animal.

8. In case of such an event, the spider is compelled to remain a patient spectator of his losses; and, when the danger is past, he endeavours to repair them by diligence. This he accomplishes, either by spinning an entirely new web, or by patching up the old one.

9. But, as the spider is originally furnished with only a limited quantity of the glutinous matter of which the web is formed, and has no means of renewing it, a time at length arrives when this substance is wholly exhausted.

10. In such a situation an old spider is left almost helpless; and his only resource is to invade the property of a younger and weaker spider; and, if possible, expel him from his territory.

11. The invader most commonly succeeds in driving the young spider from his web, of which he then remains in quiet possession; but if he should not happen to meet with one, he is obliged to procure his sustenance as well as he can: at the end of two or three months he most commonly dies of hunger.

LESSON 59.—*The Spider, (concluded.)*

1. The female spider does not begin to lay her eggs till she is two years old; and her first brood is never so numerous as when she has arrived at maturity.

2. When the eggs have been laid an hour or two to dry, the spider then prepares a bag for their reception till they are hatched. For this purpose she weaves a bag four or five times stronger than that used for catching insects.

3. This bag, when completed, is as thick, and on the inside as smooth, as paper, but rougher without. Within this the eggs are deposited; and the care and attention bestowed on their preservation are almost incredible.

4. By means of her glutinous fluid, the mother fastens her bag of eggs to the end of her body; so that the animal, when thus loaded, appears as if she had one body placed behind another.

5. If, by any accident, the bag happens to be separated from her body, she employs all her assiduity to restore it to its former situation, and seldom parts with her treasure, except with her life.

6. When the eggs are hatched, they continue for some time in the bag, until the mother bites open their prison, and sets them free.

7. But her care does not terminate with the hatching of the eggs: she carries them upon her back for some time, until the young ones are able to provide for themselves; after which period they never return to their parent, but each seeks sustenance for itself.

8. The young ones begin to spin when they are so young as scarcely to be discerned; and prepare for a life of rapine before they have strength to engage in con-

tests. Nature, in fact, appears to have formed them in all respects for plunder; for, no other insect has such powers of assault and defence.

9. These creatures are capable of destroying animals ten times bigger than themselves: even after a defeat they soon get well of their wounds, and the loss of their legs seems but a trifling injury to them, as they quickly grow again to their former size.

10. Spiders bear enmity not only to all other insects, but even to each other. An attempt was made to turn the labours of these little animals to human advantage; and a pair of gloves has actually been made from their webs.

11. A large number of them was collected for this purpose. they were constantly supplied with flies, and small feathers, which, being full of blood, serve spiders as an excellent kind of food.

12. But, although such care was taken, it was found to be impracticable to rear them in any considerable number; as they were of so malignant a nature that it was impossible to make them live together; for, instead of their ordinary food, they preferred to attack and devour each other.

LESSON 60.—*The Mantis.*

1. This singular insect derives its name, which is a Greek word meaning a soothsayer, from its perpetually resting on its hind legs, and erecting the fore paws close together, with a quick motion, as if in the act of praying.

2. For this reason the common people, in different parts of the world where it is found, consider it almost as sacred, and will not injure it on any account.

3. Roesel, wishing to observe the gradual progress

of this creature to the winged state, placed the bag containing the eggs in a large glass, which he closed, in order to prevent their escape.

4. From the time the young ones were first hatched, they exhibited marks of a savage disposition. He put different sorts of plants into the glass, but they refused them for the purpose of preying on one another.

5. This determined him to supply them with insect food. He put several ants into the glass to them, but they then betrayed as much cowardice as they had before done of barbarity; for, the instant the mantis saw the ants, they attempted to escape in every direction.

6. This was evidently an instinctive fear of a natural enemy. He next gave them some of the common house flies, which they seized with eagerness in their fore claws, and tore in pieces.

7. But, notwithstanding their apparent fondness for flies, they continued to destroy each other through savage wantonness.

8. Despairing at last, from their daily decrease, of rearing any to the winged state, he separated them into small parcels in different glasses; but here, as before, the strongest of each community destroyed the rest.

9. He afterwards received several pairs of mantis in the winged state. Profiting by his former observations, he now separated them, placing a male and a female together in different glasses; but they still exhibited signs of a rooted enmity to each other, which neither age nor sex could soften.

10. The instant they were in sight of each other, they threw up their heads, brandished their fore legs, and each waited an attack.

11. They did not long remain in this posture; for, the

boldest, throwing open his wings with the velocity of lightning, rushed at the other, and often tore it in pieces.

12. Roesel compares the attack of these creatures to that of two hussars; for, they dexterously guard and cut with the edge of the fore claws, as those soldiers do with sabres; and sometimes at a stroke one of them cleaves the other through, or severs its head from the thorax.

13. After this, the conqueror always devours his vanquished antagonist.

14. The patience of the mantis in waiting for its prey is remarkable; and the posture which superstitious people have attributed to its feelings of devotion is no other than the means it uses to catch it.

15. When it has fixed its eyes on an insect, it rarely loses sight of it, though it may cost some hours to take it.

16. If it sees an insect a little beyond its reach over its head, it slowly erects its long thorax, by means of the moveable membranes that connect it to the body; then, resting on the hinder legs, it gradually raises the fore part also.

17. If this brings it near enough to the insect, it throws open the last joint of its fore paws, and snaps the insect between the spines that are set in rows on the second joint.

18. If it is unsuccessful, it does not retract its paws, but holds them stretched out, and waits again till the insect is within its reach, when it springs up and seizes it.

19. Should the insect go far from the spot, it will fly or crawl after it slowly on the ground, like a cat; and, when the insect stops, erect itself as before.

20. These mantis have a small black pupil or sight, which moves in all directions within the parts that we usually term the eyes; so that they can see their prey

in any direction, without having occasion to disturb it by turning their head.

Lesson 61.—*The Habitations of Animals.*

1. Man, having the gift of reason and understanding, is able to contrive and build as his pleasure leads him, and his fortune will admit.

2. From the meanest huts and cottages he can erect himself stately buildings, deck them with the exquisite arts of architecture and painting, and ennoble and render them delightful by gardens, avenues, and fountains.

3. But, as ingenuity without materials would be powerless, the great varieties of trees, earths, stones, and plants, that are materials for this very service of building, and which abound in every part of the world, are deserving of our notice.

4. And no less shall we find sufficient provision made for the rest of the creatures: for, although they want the power of reason to vary their methods, and cannot add to, diminish from, or make any improvements upon their natural way; yet we find that instinct which the Creator hath implanted in them to be abundantly sufficient for the respective use and purpose of each particular kind of animal.

5. If, for instance, some beasts make to themselves no habitation, in this case we find there is no need it should be otherwise, as they are taken care of and provided for by man.

6. If others repose themselves and their young in holes and dens, it is because such guard or security is wanted; their lives being sought, either by the hostility of man, or to satisfy the appetite of rapacious animals.

7. If some creatures make their nests in houses, some in trees, some in the earth, some in stone, and some in the water, we find that they can there sufficiently and well repose, and can secure themselves, and breed up their young.

8. Thus admirable are the natural sagacity and instinct of the irrational animals, in the convenience and method of their habitations, and no less in the fabric of them.

9. The skill exerted in the dexterity of their works frequently exceeds the skill of man to imitate. With inimitable art do birds lay sticks, straws, moss, and dirt together, and form them into commodious nests.

10. With what art do many of them thatch over and coat their nests outside, to mislead and deceive the eye of spectators, as well as to guard and fence them against the injuries of weather!

11. With what prodigious skill do some birds not only weave the fibrous parts of vegetables together, and curiously tunnel and form them into nests, but also artificially suspend them on the tender twigs of trees, to keep them out of the reach of rapacious animals!

12. The manufactures of animals differ from those of men in many striking particulars.

13. No animal ever introduced any new improvements or any variation from the former practice: every one of the species has equal skill from the beginning, without teaching, without experience, and without habit: every one has its art by a kind of inspiration, with the ability of working in it to perfection, without any knowledge of its principles, rules, and end.

LESSON 62.—*The Banian Tree, or Indian Fig.*

1. The Banian or Indian fig-tree is a native of several parts of the East Indies. It has a wooden stem, branching to a great height and vast extent, with heart-shaped entire leaves ending in acute points.

2. Some of these trees are of amazing size and great extent; as they are continually increasing, and, contrary to most other things in animal and vegetable life, seem to be almost exempt from decay.

3. Every branch from the main body throws out its own roots; at first in small tender fibres, several yards from the ground: these continually grow thicker until they reach the surface; and there, striking in, they increase to large trunks, and become parent trees, shooting out new branches from the top: these in time suspend their roots, which, swelling into trunks, produce other branches: thus continuing in a state of progression as long as the earth, the first parent of them all, contributes her sustenance.

4. The Hindus are peculiarly fond of the Banian tree. They look upon it as an emblem of the Deity, from its long duration, its outstretching arms, and overshadowing beneficence. They almost pay it divine honours.

5. Near these trees the most esteemed pagodas are generally erected: under their shade ascetics spend their lives; and the natives of all castes and tribes are fond of recreating themselves in their cool recesses, impervious to the hottest beams of a tropical sun.

6. Roxburgh says that this tree is found in its greatest perfection and beauty about the villages on the skirts of the Circar mountains. He had seen some, which were full five hundred yards round the circumference of the branches, and a hundred feet high, the

principal trunk being more than twenty-five feet to the branches, and eight or nine feet in diameter.

7. A still larger tree of this kind is said to grow about ten miles from the city of Baroche, in the province of Guzerat. According to the account from which this is taken, it was once much larger than at present; yet what remains is about 2000 feet in circumference, measured round the principal stems; the overhanging branches, not yet struck down, cover a much larger space.

8. The chief trunks of this single tree amount to 350; the smaller stems, formed into strong supporters, are more than 3000; and every one of these is casting out new branches and hanging roots, in time to form trunks, and become the parents of a future progeny.

9. It is generally filled with green woodpigeons, doves, peacocks, and a variety of feathered songsters; crowded with families of monkeys performing their antic tricks; and shaded by bats of a large size, many of them measuring upwards of six feet from the extremity of one wing to that of the other.

10. This tree not only affords shelter, but sustenance, to all its inhabitants; being covered amidst its bright foliage with small figs of rich scarlet, on which they all regale with as much delight as the lords of the creation on their more various and costly fare.

Lesson 63.—*The Coffee Tree.*

1. The coffee-tree, whose seeds or berries afford a well-known and agreeable liquor, is a native of Arabia Felix, where it generally rises to the height of seven or eight and sometimes twelve feet, with a trunk from ten to fifteen inches in circumference.

2. It is covered with a gray smooth bark, and shoots out, through the whole length of its stem, a growth of branches, which are always opposite to each other: it has its leaves arranged in pairs in the same manner.

3. From the bottom of the leaves spring fragrant white flowers, very much like those of the jasmine; and, when these flowers or blossoms drop off, they leave a small fruit behind, which is green at first, but reddens as it ripens, and is like a hard cherry, both in shape and colour.

4. Two, three, or more of these berries grow together on the same part of the twig, each coated with a husk or tegument, enclosing another and finer skin, in which two seeds or kernels are contained, which are what we call coffee.

5. The fruit is usually gathered in May; which is done by shaking the trees, the berries falling on cloths spread underneath to receive them.

6. These are laid on mats to dry in the sun: the outer husks are then opened and separated by drawing rollers of wood or iron over them; after which the berries are exposed to the sun a second time, and then sifted clean for use or sale.

7. The husks however are not wasted; for the Arabs roast them as we do the berries; and the drink made of them, having a little tartness, is cooling and pleasant in the heat of summer.

8. The drink made of coffee-berries has been common in Europe above a hundred years, and much longer among the Turks.

9. Coffee was first brought into France by the famous traveller M. Thevenot; and a Greek called Pasqua, who was brought to England as a servant in 1652, first set

up the profession of a coffee-house keeper, and introduced the use of the liquor among the English.

Lesson 61.—*The Sugarcane.*

1. The reed or cane, which yields us such an agreeable juice, is like the reeds we generally see in morasses and on the edges of lakes; except that the skin of these latter is hard and dry, and their pith void of juice; whereas the skin of the sugarcane is softer, and the pith very juicy, though in a greater or less degree, according to the goodness of the soil, its exposure to the sun, the season it is cut in, and its age; which circumstances contribute equally to its goodness and its bulk.

2. The sugarcane usually grows to the height of six or seven feet, sometimes higher, exclusive of the long green-tufted leaves at top, from the middle of which rise the flower and the seed.

3. The stem or stalk is divided by knots or joints, whence likewise shoot out leaves, but these usually fall as the cane rises: and it is a sign that the cane is not good, or that it is far from its maturity, when the knots are beset with leaves. The cane is yellowish when ripe, and about an inch in diameter.

4. When the canes are ripe, they are cut up one at a time with a proper instrament, being too large to be mowed by a scythe.

5. The canes are then bundled up into fagots, and carried to the mills, which are very curious machines, contrived to bruise them, and press out the liquor or juice they contain.

6. The juice pressed from the canes is conveyed by a leaden canal into the sugar-house, where it passes successively into a number of coppers or caldrons, heated

by different degrees of fire; by which process the juice of the canes is purified, thickened, and rendered fit to be converted to any of the kinds of sugar.

LESSON 65.—*Phenomena of the Vegetable Kingdom.*

1. The power of changing place is not altogether peculiar to animals; examples of different kinds of motion are to be discovered in the vegetable kingdom. When the roots of a tree, for instance, meet with a stone, or any other obstruction to their motion, in order to avoid it they alter their direction.

2. They will turn also from barren to fertile earth, which indicates something like a selection of food; and, when confined to a house, they will uniformly bend toward the window or opening through which the rays of light are introduced.

3. The sensitive plant possesses the faculty of motion in a very eminent degree. On the slightest touch its leaves suddenly contract, and the branch bends toward the earth.

4. The moving plant from the East Indies exhibits the most astonishing example of vegetable motion. Its leaves are incessantly in movement, some rising, and others falling, and others whirling circularly by twisting their stems. Its motions cease during the night, and when the weather is cold and cloudy.

5. The American plant called Venus's Fly-trap, affords an extraordinary instance of vegetable motion. Its leaves are joined, and furnished with two rows of strong prickles.

6. Their surfaces secrete a sweet liquor, and allure the approach of flies; but, no sooner are they touched by the legs of a fly, than the two lobes of the leaf in-

stantly rise, the rows of prickles lock themselves fast together, and squeeze the unwary animal to death. If a straw or a pin be introduced between the lobes, the same motions are excited.

7. When a seed is sown in a reversed position, the young root turns downwards to enter the earth, and the stem bends upwards to ascend into the air. Confine a young stem in an inclined position, it will nevertheless continue to grow in its former perpendicular direction.

8. Twist a branch of any tree, in such a manner that the lower surfaces of the leaves are turned toward the sky, and in a short time all these leaves will resume their original position.

9. Many leaves follow the course of the sun. In the morning their upper surfaces are presented to the east: at noon they face the south and when the sun sets they are directed to the west.

10. All plants make strong efforts to escape from darkness and shade, and to procure the influence of the sun

Chaptlr V.—DIALOGUES.

Dialogue 1.—*Eyes and No Eyes; or the art of Seeing.*

Well, Robert, where have you been walking this afternoon? (said a tutor to one of his pupils at the close of a holiday.)

R. I have been to Broom-heath, and round by the windmill upon Camp-mount, and home through the meadows by the river side.

T. Well, that is a pleasant round.

R. I thought it very dull, sir; I scarcely met with a single person. I would much rather have gone along the high road.

T. Why, if seeing men and horses is your object, you would indeed be better entertained on the high road. But did you see William?

R. We set out together; but he lagged behind in the lane so I walked on, and left him.

T. That was a pity. He would have been company for you.

R. Oh, he is so tedious, always stopping to look at this thing and that! I would rather walk alone. I dare say he is not come home yet.

T. Here he comes. Well, William, where have you been?

W. Oh, the pleasantest walk! I went all over Broomheath, and so up to the mill at the top of the hill, and then down among the green meadows by the side of the river.

T. Why, that is just the round Robert has been taking, and he complains of its dulness, and prefers the high road.

W. I wonder at that. I am sure I hardly took a step that did not delight me, and I have brought home my handkerchief full of curiosities.

T. Suppose then you give us an account of what amused you so much. I fancy it will be as new to Robert as to me.

W. I will do it readily. The lane leading to the heath, you know, is close and sandy, so I did not mind it much, but made the best of my way. However I spied a curious thing enough in the hedge. It was an old tree,

out of which grew a great bunch of something green, quite different from the tree itself. Here is a branch of it.

T. Ah! this is mistletoe, a plant of great fame for the use made of it by the Druids of old, in their religious rites and incantations. It is one of those plants which do not grow in the ground by a root of their own, but fix themselves upon other plants; whence they have been humorously styled *parasitical*, as being hangers-on, or dependents. It was the mistletoe of the oak that the Druids particularly honoured.

W. A little further on I saw a green woodpecker fly to a tree, and run up the trunk like a cat.

T. That was to seek for insects in the bark, on which they live. They bore holes with their strong bills for that purpose, and do much damage to the trees by it.

W. What beautiful birds they are!

T. Yes; they have been called, from their colour and size, the English parrot.

W. When I got upon the open heath, how charming it was! The air seemed so fresh, and the prospect on every side so free and unbounded! Then, it was all covered with gay flowers, many of which I had never observed before. There were at least three kinds of heath, (I have got them in my handkerchief here,) and broom, and bell-flower, and many others of all colours, of which I will beg you presently to tell me the names.

T. That I will, readily.

W. I saw, too, several birds that were new to me. There was a pretty grayish one, of the size of a lark, that was hopping about some great stones; and, when he flew, he showed a great deal of white above his tail.

T. That was a wheat-ear.

W. There was a flock of lapwings upon a marshy part

of the heath, that amused me much. As I came near them, some of them kept flying round and round just over my head, and crying *pewit* so distinctly, that one might almost fancy they spoke. I thought I should catch one of them; for, he flew as if one of his wings were broken, and often tumbled close to the ground; but, as I came near, he always contrived to get away.

T. Ha, ha! you were finely taken in, then! This was all a trick of the bird's, to entice you away from its nest for, they build upon the bare ground, and their nest would easily be observed, did they not draw off the attention of intruders by their loud cries and counterfeit lameness.

W. I wish I had known that, for he led me a long chase, often over shoes in water. However, it was the cause of my falling in with an old man and a boy, who were cutting and piling up turf for fuel, and I had a good deal of talk with them about the manner of preparing the turf. They gave me, too, a creature I never saw before—a young viper, which they had just killed, together with its dam. I have seen several common snakes, but this is thicker in proportion, and of darker colour than they are.

T. True Vipers frequent those turfy, boggy grounds pretty much; and I have known several turf-cutters bitten by them.

W. They are very venomous, are they not?

T. Enough so to make their wounds painful and dangerous, though they seldom prove fatal.

W. Well—I then took my course up to the windmill on the mount. I climbed up the steps of the mill in order to get a better view of the country round. What an extensive prospect! I counted fifteen church steeples; and

I saw several gentlemen's houses peeping out from the midst of green woods and plantations; and I could trace the windings of the river all along the low grounds, till it was lost behind a ridge of hills. Well—a thought struck me that, as the hill is called *Camp-mount*, there might probably be some remains of ditches and mounds, with which I have read that camps were surrounded. And I really believe I discovered something of that sort running round one side of the mount.

T. Very likely you might. I know antiquaries have described such remains as existing there, which some suppose to be Roman, others Danish. We will examine them further when we go.

W. From the hill I went straight down to the meadows below, and walked on the side of a brook that runs into the river. It was all bordered with reeds and flags, and tall flowering plants, quite different from those I had seen on the heath. As I was getting down the bank, to reach one of them, I heard something plunge into the water near me. It was a large water-rat, and I saw it swim over to the other side, and go into its hole. There were a great many large dragon-flies all about the stream. I caught one of the finest, and have got him here in a leaf. But how I longed to catch a bird that I saw hovering over the water, and every now and then darting down into it! It was all over a mixture of most beautiful green blue, with some orange colour. It was somewhat less than a thrush, and had a large head and bill, and a short tail.

T. I can tell you what that bird was—a kingfisher, the celebrated halcyon of the ancients, about which so many tales are told. It lives on fish, which it catches in the manner you saw. It builds in holes in the banks;

and is a shy, retired bird, never to be seen far from the stream where it inhabits.

W. I must try to get another sight of him, for I never saw a bird that pleased me so much. Well, I followed this little brook till it entered the river, and then took the path that runs along the bank. On the opposite side I observed several little birds running along the shore, and making a piping noise. They were brown and white, and about as big as a snipe.

T. I suppose they were sandpipers, one of the numerous family of birds that get their living by wading among the shallows, and picking up worms and insects.

W. There were a great many swallows too, sporting upon the surface of the water, that entertained me with their motion: sometimes they dashed into the stream, sometimes they pursued one another so quickly that the eye could scarcely follow them. In one place, where a high steep sandbank rose directly above the river, I observed many of them go in and out of holes, with which the bank was bored full.

T. Those were sand-martins. They are of a mouse colour above, and white beneath. They make their nests and bring up their young in these holes, which run to a great depth, and by their situation are secure from all plunderers.

W. A little further I saw a man in a boat, who was catching eels in an odd way. He had a long pole, with broad iron prongs at the end. This he pushed straight down into the mud, in the deepest parts of the river, and fetched up the eels sticking between the prongs.

T. I have seen this method. It is called spearing eels.

W. While I was looking at him, a heron came flying

over my head, with his large flagging wings. He alighted at the next turn of the river, and I crept softly behind the bank to watch his motions. He had waded into the water, as far as his long legs would carry him, and was standing with his neck drawn in, looking intently on the stream. Presently he darted his long bill as quick as lightning into the water, and drew out a fish, which he swallowed. I saw him catch another in the same manner. He then took alarm at some noise I made, and flew away slowly to a wood at some distance, where he settled.

T. Probably his nest was there, for herons build upon the loftiest tree they can find, and sometimes in society together.

W. I then turned homeward across the meadows, where I stopped a while to look at a large flock of starlings, which kept flying about at no great distance. I could not tell at first what to make of them; for they rose all together from the ground as thick as a swarm of bees, and formed themselves into a kind of black cloud hovering over the field. After taking a short round, they settled again, and presently rose again in the same manner. I dare say there were hundreds of them.

T. Perhaps so; for in the fenny countries their flocks are so numerous as to break down whole acres of reeds by settling on them.

W. After I had left the meadows, I crossed the cornfields in the way to our house, and passed close by a deep marl-pit. Looking into it, I saw, on one of the sides, a cluster of what I took to be shells; and, upon going down, I picked up a clod of marl, which was quite full of them; but how sea-shells could get there I cannot imagine.

T. I do not wonder at your surprise, since many philosophers have been much perplexed to account for the same appearance. It is not uncommon to find great quantities of shells and relics of marine animals, even in the bowels of high mountains, very remote from the sea.

W. I got to the high field next to our house just as the sun was setting, and I stood looking at it till it was quite lost. What a glorious sight! The clouds were tinged with purple and crimson and yellow of all shades and hues; and the clear sky varied from blue to a fine green at the horizon. But how large the sun appears just as it sets! I think it seems twice as big as when it is overhead.

T. It does so; and you may probably have observed the same thing of the moon at its rising.

W. I have; but pray what is the reason of this?

T. It is a deception of the sight, depending upon principles which I cannot well explain to you, till you know something of that branch of science called optics. The moon looks as if she were nearer to us at rising than afterwards; but, in truth, she is four thousand miles farther off in the horizon than when she is in the zenith, that is to say, directly over our heads. But, what a number of new ideas this afternoon's walk has afforded you! I do not wonder that you found it amusing; it has been very instructive too. Did *you* see nothing of these sights, Robert?

R. I saw some of them, but I did not take particular notice of them.

T. Why not?

R. I do not know. I did not care about them; and I made the best of my way home.

T. That would have been right, if you had been sent

on a message; but, as you walked only for amusement, it would have been wiser to have sought out as many sources of it as possible. But so it is—one man walks through the world with his eyes open, and another with them shut: and upon this difference depends all the superiority of knowledge which the one acquires above the other. I have known sailors who had been in all the quarters of the world, and could tell you nothing but the signs of the tippling-houses they frequented in different ports, and the price and quality of the liquor. On the other hand, Dr. Franklin could not cross the English channel without making some observations useful to mankind. While many a vacant, thoughtless youth is whirled throughout Europe, without gaining a single idea worth crossing a street for, the observing eye and inquiring mind find matter of improvement and delight in every ramble in town or country. Do *you* then, William, continue to make use of your eyes, and *you*, Robert, learn that eyes were given you to use.

Dialogue 2.—*On Emblems.*

Pray, papa, (said Cecilia,) what is an emblem? I have met with the word in my lesson to-day, and I do not quite understand it.

P. An emblem, my dear, is a visible image of an invisible thing.

C. I can hardly comprehend you.

P. Well, I will explain it more at length. There are certain notions that we form in our minds, without the help of our eyes, or any of our senses. Thus Virtue, Vice, Honour, Disgrace, Time, Death, and the like, are not sensible objects, but ideas of the understanding.

C. Yes. We cannot feel them, or see them; but we can think about them.

P. True. Now it sometimes happens that we wish to present one of these in a visible form; that is, to offer something to the sight that shall raise a similar notion in the minds of the beholders. In order to do this, we must take some action or circumstance belonging to it, capable of being expressed by painting or sculpture; and this is called a type or emblem.

C. But how can this be done?

P. I will tell you by an example. You know the Court-house where trials are held. it has above the door the figure of a blindfolded female, holding a sword in one hand, and scales in the other. It would have been easy to write over the door, in order to distinguish it, "This is the Court-house;" but it is a more ingenious and elegant way of pointing it out, to place upon the building a figure representing the purpose for which it was erected, namely, to distribute justice. For this end the notion of justice is to be personified, that is, changed from an idea of the understanding into one of the sight. A human figure is therefore made, distinguished by tokens which bear a relation to the character of that virtue. Justice carefully *weighs* both sides of a cause; she is therefore represented as holding a *pair of scales*. It is her office to *punish* crimes; she therefore bears *a sword*. This is then an *emblematical figure;* and the sword and scales are *emblems*.

C. I understand this very well. But why is she blindfolded?

P. To denote her impartiality—that she decides only from the merits of the case, and not from a view of the parties.

C. How can she weigh anything, though, when her eyes are blinded?

P. Well objected. These are two inconsistent emblems, each proper in itself, but, when used together, making a contradictory action. An artist of judgment will therefore drop one of them; and accordingly the best modern figures of Justice have the balance and sword, without the bandage over the eyes.

C. Is there not the same fault in making Cupid, as the emblem of love, blindfolded, and yet putting a bow and arrow into his hand?

P. There is: unless it is meant to imply that love shoots often at random, and without any forethought.

C. I have a figure of *Death* in my fable-book. I suppose that is emblematical?

P. Certainly, or you could not know that it meant Death. How is he represented?

C. He is nothing but bones; and he holds a scythe in one hand, and an hourglass in the other.

P. Well; how do you interpret these emblems?

C. I suppose he is all bones, because nothing but bones are left after a dead body has lain long in the grave.

P. True. This, however, is not so properly an emblem, as the real and visible effect of death. But the scythe?

C. Is not that because death mows down everything?

P. It is. No instrument could so properly represent the wide-wasting sway of death, which sweeps down the race of animals, like flowers falling down under the hand of the mower.

C. The hourglass, I suppose, is to show people their time is come.

P. Right. In the hourglass that Death holds, all

the sand is run out from the upper to the lower part. Have you never observed upon a monument an old figure, with wings and a scythe; and with his head bald, all but a single lock before?

C. Oh yes;—and I have been told it is *Time*.

P. Well, and what do you make of it? Why is he old?

C. Oh! because time has lasted a long while.

P. And why has he wings?

C. Because time is swift, and flies away.

P. What does his scythe mean?

C. I suppose that is, because he destroys and cuts down everything, like Death.

P. True. I think, however, a weapon rather slower in its operation, as a pickaxe, would have been more suitable to the gradual action of time. But what is his single lock of hair for?

C. I have been thinking, and cannot make it out.

P. I thought that would puzzle you. It relates to time as giving *opportunity* for doing anything. It is to be seized as it presents itself, or it will escape, and cannot be recovered. Thus the proverb says, "Take time by the forelock." Well—now you understand what emblems are.

C. Yes, I think I do. I suppose the painted sugar-loaves over the grocer's shop, and the mortar over the apothecary's, are emblems too.

P. Not so, properly. They are only pictures of things which are themselves objects of sight, as the real sugar-loaf in the shop of the grocer, and the real mortar in that of the apothecary. However, an implement belonging to a particular rank or profession is commonly used as an emblem to point out the man exercising that rank or profession. Thus, a crown is considered as an

emblem of a king, a sword or spear, of a soldier; an anchor, of a sailor, and the like.

C. I remember Captain Heartwell, when he came to see us, had the figure of an anchor on all his buttons.

P. He had. That was the emblem or badge of his belonging to the navy.

C. But you told me that an emblem was a visible sign of an invisible thing, yet a sea-captain is not an invisible thing.

P. He is not invisible as a man, but his profession is invisible.

C. I do not well understand.

P. Profession is a *quality*, belonging equally to a number of individuals, however different they may be in external form and appearance. It may be added or taken away, without any visible change. Thus, if Captain Heartwell were to give up his commission, he would appear to you the same man as before. It is plain, therefore, that what in that case he had lost, namely, his profession, was a thing invisible. It is one of those ideas of the understanding which I before mentioned to you, as different from a sensible idea.

C. I comprehend it now.

DIALOGUE 3.—*Canute and his Courtiers, or, Flattery reproved.*

Canute. Is it true, my friends, as you have often told me, that I am the greatest of monarchs?

Offa. It is true, my liege; you are the most powerful of all kings.

Oswald. We are all your slaves. we kiss the dust of your feet.

Offa. Not only we, but even the elements, are your

slaves. The land obeys you, from shore to shore; and the sea obeys you.

Can. Does the sea, with its loud boisterous waves, obey me? Will that terrible element be still at my bidding?

Offa. Yes, the sea is yours; it was made to bear your ships upon its bosom, and to pour the treasures of the world at your royal feet. It is boisterous to your enemies, but it knows you to be its sovereign.

Can. Is not the tide coming up?

Os. Yes, my liege; you may perceive the swell already.

Can. Bring me a chair then; set it here, upon the sands.

Offa. Where the tide is coming up, my gracious lord?

Can. Yes, set it just here.

Os. (Aside.) I wonder what he is going to do!

Offa. (Aside.) Surely he is not so silly as to believe us.

Can. O mighty ocean! thou art my subject; my courtiers tell me so; and it is thy duty to obey me. Thus, then, I stretch my sceptre over thee, and command thee to retire. Roll back thy swelling waves, nor let them presume to wet the feet of me, thy royal master.

Os. (Aside.) I believe the sea will pay very little regard to his royal commands.

Offa. See how fast the tide rises!

Os. The next wave will come up to the chair. It is folly to stay; we shall be covered with salt water.

Can. Well, does the sea obey my commands? If it be my subject, it is a very rebellious subject. See how it swells, and dashes the angry foam and salt spray over my sacred person! Vile sycophants! did you think I was the dupe of your base lies? that I believed your abject flatteries? Know, there is but one Being whom the

sea will obey. He is Sovereign of heaven and earth, King of kings, and Lord of lords. It is only He who can say to the ocean, "Thus far shalt thou go, but no farther, and here shall thy proud waves be stayed." A king is but a man; and a man is but a worm. Shall a worm assume the power of the great God, and think the elements will obey him? May kings learn to be humble from my example, and courtiers learn truth from your disgrace!

DIALOGUE 4.—*The Art of Distinguishing.*

Charles and his Father.

Father. Come hither, Charles; what is that you see grazing in the meadow before you?

Charles. It is a horse.

F. Whose horse is it?

C. I do not know; I never saw it before.

F. How do you know it is a horse, if you never saw it before?

C. Because it is like other horses.

F. Are all horses alike, then?

C. Yes.

F. If they are alike, how do you know one horse from another?

C. They are not quite alike.

F. But they are so much alike, that you can easily distinguish a horse from a goat?

C. Yes, indeed.

F. Or from a cabbage?

C. A horse from a cabbage? Yes, surely I can.

F. Very well; then let us see if you can tell how a horse differs from a cabbage.

C. Very easily; a horse is alive.

F. True; and how is everything called that is alive?

C. I believe all things that are alive are called animals.

F. Right; but can you tell me in what a horse and a cabbage are alike?

C. Nothing, I believe.

F. Yes, there is one thing in which the slenderest moss that grows upon the wall is like the greatest man, or the best of created beings.

C. Because God made them.

F. Yes; and how do you call things that are made?

C. Creatures.

DIALOGUE 5.—*The Art of Distinguishing, (continued.)*

F. A horse, then, is a creature; but a living creature; that is to say, an animal.

C. And a cabbage is a dead creature; that is the difference.

F. Not so, neither; nothing is dead that has never been alive.

C. What must I call it then, if it is neither dead nor alive?

F. A lifeless or inanimate creature; there is the animate and the inanimate creation. Plants, stones, metals, are of the latter class; horses belong to the former.

C. But the gardener told me some of my cabbages were dead, and some were alive?

F. Very true. Plants have a vegetative life, a principle of growth and decay; this is common to them with all organized bodies; but they have not sensation, at least we cannot discover that they have: they have not life, therefore, in the sense in which animals enjoy it.

my sac horse is called an animal, then?
was the du but a salmon is an animal, and so is a spar-
ject flatter will you distinguish a horse from these?

C. A salmon lives in the water and swims; a sparrow flies, and lives in the air.

F. I think a salmon could not walk upon the ground, even if it could live out of the water.

C. No, indeed; it has no legs.

F. And a bird would not gallop like a horse.

C. No; it would hop away upon its two slender legs.

F. How many legs has a horse?

C. Four.

F. And a camel?

C. Four still.

F. Do you know any animals that live upon the earth, that have not four legs.

C. I think not; they have all four legs, except worms, and insects, and such things.

DIALOGUE 6.—*The Art of Distinguishing, (continued.)*

F. You know, I suppose, what an animal is called that has four legs?

C. A quadruped.

F. A horse then is a quadruped: by this we distinguish him from birds, fishes, and insects.

C. And from men.

F. True; but, if you had been talking about birds, you would not have found it so easy to distinguish them.

C. How so? A man is not at all like a bird.

F. Yet an ancient philosopher, whose name was Plato, could find no way to distinguish them, but by calling man a two-legged animal without feathers.

C. I think he was very silly: they are not at all alike, though they both have two legs.

F. Another ancient philosopher, called Diogenes, was

of your opinion. He stripped a cock of its feathers, and turned it into the school where Plato was teaching, and said, Here is Plato's man for you.

C. I wish I had been there, I should have laughed very much.

F. Probably. Before we laugh at others, however, let us see what we can do ourselves. We have not yet found anything which will distinguish a horse from an elephant, or from a Norway rat.

C. Oh, that is easy enough. An elephant is very large, and a rat is very small; a horse is neither large nor small.

F. Before we go any further, look what is settled on the skirt of your coat.

C. It is a butterfly. What a prodigiously large one! I never saw such a one before.

F. Is it larger than a rat, think you?

C. No, that it is not.

F. Yet you called the butterfly large, and you called the rat small.

C. It is very large for a butterfly.

DIALOGUE 7.—*The Art of Distinguishing, (continued.)*

F. You see, therefore, that large and small are *relative terms.*

C. I do not well understand that phrase.

F. It means that they have no precise and determinate signification in themselves, but are applied differently, according to the other ideas which you join with them, and the different positions in which you view them.

This butterfly, therefore, is large, compared with those of its own kind; and small, compared with many other kinds of animals.

Besides, there is no circumstance which varies more

than the size of individuals. If you were to give an idea of a horse from its size, you would certainly say it was much bigger than a dog; yet, if you take the smallest Shetland horse, and the largest Irish greyhound, you will find them very much upon a par. Size, therefore, is not a circumstance by which you can accurately distinguish one animal from another; nor yet is colour.

C. No, there are black horses, and bay, white, and pied.

F. But you have not seen that variety of colours in a hare for instance.

C. No; a hare is always brown.

F. Yet, if you were to depend upon that circumstance, you would not convey the idea of a hare to a mountaineer, or an inhabitant of Siberia; for he sees them white as snow. We must therefore find out some circumstances that do not change like size and colour, and I may add shape, though they are not so striking.

DIALOGUE 8.—*The Art of Distinguishing, (continued.)*

F. Look at the feet of quadrupeds; are they all alike?

C. No; some have long taper claws, and some have thick clumsy feet without claws.

F. The thick feet are horny, are they not?

C. Yes; I recollect they are called hoofs.

F. And the feet that are not covered with horn, and are divided into claws, are called digitated, from a Latin word digitus, a finger; because they are parted like fingers. Here, then, we have one grand division of quadrupeds into hoofed and digitated. Of which division is the horse?

C. He is hoofed.

F. There are a great many different kinds of horses; did you ever know any one that was not hoofed?

C. No, never.

F. Do you think we run any hazard of a stranger telling us, Sir, horses are hoofed indeed in your country; but in mine, which is in a different climate, and where we feed them differently, they have claws?

C. No, I dare say not.

F. Then we have got something to our purpose; a circumstance easily marked, which always belongs to the animal, under every variation of situation or treatment. But a goat is hoofed, and so is a sheep; we must distinguish still farther. You have often stood by, I suppose, while the smith was shoeing a horse. What kind of a hoof has he?

C. It is round, and all in one piece.

F. And is that of a goat so?

C. No, it is divided.

F. A horse, then, is not only hoofed, but whole-hoofed. Now, how many animals do you think there are in the world that are whole-hoofed?

C. Indeed I do not know.

F. There are, among all animals that we are acquainted with, either in this country or in any other, only the horse, the ass, and the zebra, which is a species of wild ass. Now, therefore, you see we have nearly accomplished our purpose; we have only to distinguish him from the ass.

C. That is easily done, I believe; I should be sorry if anybody could mistake my little horse for an ass.

F. It is not so easy, however, as you imagine: the eye readily distinguishes them by the air and general appearance; but naturalists have been rather puzzled

to fix upon any specific difference which may serve the purpose of a definition. Some have therefore fixed upon the ears, others on the mane and tail. What kind of ears has an ass?

C. Oh, very long ears!

F. And the horse?

C. The horse has small ears, nicely turned, and upright.

F. And the mane; is there no difference there?

C. The horse has a fine long flowing mane; the ass has hardly any.

F. And the tail; is it not fuller of hair in the horse than in the ass?

C. Yes, the ass has only a few long hairs at the end of the tail; but the horse has a long bushy tail when it is not cut.

DIALOGUE 9.—*The Art of Distinguishing, (continued.)*

F. Now, then, observe what particulars we have got. A horse is an animal of the quadruped kind, whole-hoofed, with short cut ears, a flowing mane, and a tail covered in every part with hairs. Now, is there any other animal, think you, in the world, that answers these particulars?

C. I do not know; this does not tell us a great deal about him.

F. And yet it tells us enough to distinguish him from all the different tribes of the creation, with which we are acquainted in this part of the earth. Do you know now what we have been making?

C. What?

F. A definition. It is the business of a definition to distinguish precisely the thing spoken of from any other thing, and to do it in as few terms as possible.

Its object is to separate the subject of definition, first, from those with which it has only a general resemblance; then from those which agree with it in a greater variety of particulars; and so on, till, by constantly throwing out all which have not the qualities we have taken notice of, we come at length to the individual or the species we wish to ascertain.

It is a kind of chase, and resembles the manner of hunting in some countries, where they first inclose a large circle with their dogs, nets, and horses; and then, by degrees, draw their toils closer and closer, driving their game before them, till it is at length brought into so narrow a compass, that the sportsmen have nothing to do but to knock down their prey.

C. Just as we have been hunting this horse, till at last we held him fast by his ears and tail.

DIALOGUE 10.—*The Art of Distinguishing, (concluded.)*

F. I should observe to you that, in the definition naturalists give a horse, it is generally mentioned that he has six cutting teeth in each jaw; because this circumstance of the teeth has been found a very convenient one for characterizing large classes; but, as it is not absolutely necessary here, I have omitted it: a definition being the more perfect the fewer particulars you make use of, provided you can say with certainty from these particulars, the object so characterized must be this, and no other whatever.

C. But papa, if I had never seen a horse, I should not know what kind of animal it was by this definition.

F. Let us hear, then, how you would give me an idea of a horse.

C. I would say it is a fine large prancing creature, with slender legs, and an arched neck, and a sleek smooth skin, and a tail that sweeps the ground, and that he snorts and neighs very loud, and tosses his head, and runs as swiftly as the wind.

F. You have said very well: but it is a description, not a definition.

C. What is the difference?

F. A description is intended to give you a lively picture of an object, as if you saw it, and it ought to be very full. A definition gives no picture to those who have not seen it; it rather tells you what its subject is not, than what it is, by giving you such clear specific marks, that it shall not be possible to confound it with anything else, and hence it is of the greatest use in throwing things into classes. We have a great many beautiful descriptions from ancient authors, so loosely worded that we cannot certainly tell what animals are meant by them. whereas, if they had given us definitions, three lines would have ascertained their meaning.

C. I like a description best, papa.

F. Perhaps so, I believe I should have done the same at your age. Remember, however, that nothing is more useful than to learn to form ideas with precision, and to express them with accuracy. I have not given you a definition to teach you what a horse is, but to teach you to think.

Dialogue 11.—*Of Man.*

Charles. You gave me the definition of a horse some time ago—Pray, sir, how is a man defined?

Father. That is worth inquiring. Let us consider then. He must either stand by himself, or be ranked among

the quadrupeds; for there are no other two-legged animals but birds, which he certainly does not resemble.

C. But how can he be made a quadruped?

F. By setting him to crawl on the ground, in which case he will as much resemble a baboon, as a baboon set on his hind legs does a man. In reality, there is little difference between the arms of a man and the fore legs of a quadruped; and in all other circumstances of internal and external structure they are evidently formed upon the same model.

C. I suppose then we must call him a digitated quadruped, that generally goes upon its hind legs.

F. A naturalist could not reckon him otherwise; and accordingly, a very learned man, called Linnæus, has placed him in the same division with apes, macocos, and bats.

C. Apes, macocos, and bats!

F. Yes; they have all four cutting teeth in the upper jaw, and teats on the breast. How do you like your relations?

C. Not at all.

F. Then we will get rid of them, by applying to the other part of human nature, the mind. Man is an animal possessed of reason, and the only one. This therefore is enough to define him.

C. I have often heard that man is a rational creature, and I have a notion what that means; but I should like to have an exact definition of reason.

F. Reason is the faculty by which we compare ideas and draw conclusions. A man walking in the woods of an unknown country finds a bow. He compares it in his mind with other bows, and forms the conclusion that it must have been made by man, and that therefore the

country is probably inhabited. He discovers a hut; sees in it half-burnt wood, and finds that the ashes are not quite cold. He concludes therefore with certainty, not only that there are inhabitants, but that they cannot be far distant? No other animal could do this.

C. But would not a dog, that had been used to live with men, run into such a hut, and expect to find people in it?

F. He probably would—and this, I acknowledge, is very like reason; for, he may be supposed to compare in his mind the hut he has lived in with that which he sees, and to conclude that, as there were men in the first, there are in the last. But how little a way does this carry him! He finds no men there, and he is unable by any marks to form a judgment how long they have been absent, or what sort of people they were; still less does he form any plan of conduct in consequence of his discovery.

C. Then is not the difference only, that man has much reason, and brutes little?

F. If we adhere to the mere words of the definition of reason, I believe this must be admitted; but, in the exercise of it, the superiority of the human faculties is so great, that man is in many points absolutely distinguished from brutes. In the first place, he has that use of speech which no animal has attained.

C. Cannot many animals make themselves understood by one another by their cries?

F. They can make known a few of their common wants and desires; but they cannot discourse, or communicate ideas stored up in the memory. It is this faculty which makes man an improvable being; the wisdom and experience acquired by one individual being thus transmitted to others, and so on in an endless

series of progression. There is no reason to suppose that the dogs of the present day have taught each other to know more than those which lived a thousand years ago; but the men of this age are much better acquainted with numberless arts and sciences than their remote ancestors; since, by the use of speech and of writing, (which is speech addressed to the eye,) every age adds its own discoveries to all former ones. This knowledge of the past likewise gives man a great insight into the future. Shakspeare excellently defines man, by saying that he is a creature "made with large discourse, looking before and after."

C. Animals must surely know something of the future, when they lay up a store of provisions for the winter?

F. No,—it is pretty certain that this is not the case: for they will do it as much in the first year of their lives as in any other. Young bees turned out of their hive, as soon as they have swarmed and got a habitation, begin laying up honey, though they cannot possibly foresee the use they shall have for it. There are a vast number of actions of this kind in animals, which are directed to a useful end, but an end of which the animal knows nothing. And this is what we call instinct, which we properly distinguish from reason. Man has less of it than almost any other animal, because he wants it less. Another point of essential difference is, that man is the only animal that makes use of instruments in any of his actions. He is a tool-making and machine-making animal. By means of this faculty alone he is everywhere lord of the creation, and has equally triumphed over the subtlety of the cunning, the swiftness of the fleet, and the force of the strong. He is the only animal that has found out the use of fire, a most important acquisition.

C. I have read of some large apes that will come and sit around a fire in the woods when men have left it, but have not the sense to keep it in by throwing on sticks.

F. Still less then could they light a fire. In consequence of this discovery, man cooks his food, which no other animal does. He alone fences against the cold by clothing as well as by fire. He alone cultivates the earth, and keeps living animals for future uses.

C. But have not there been wild men bred in the woods that could do none of these things?

F. Some instances of this kind are recorded, and they are not to be wondered at; for, man was meant to be a gregarious animal, or one living in society, in which alone his faculties have full scope, and especially his power of improving by the use of speech. These poor solitary creatures, brought up with the brutes, were in a state entirely unnatural to them. A solitary bee, ant, or beaver, would have none of the skill and sagacity of those animals in their proper social condition. Society sharpens all faculties, and gives ideas and views which never could have been entertained by an individual.

C. But some men that live in society seem to be little above the brutes, at least when compared with other men. What is a Hottentot in comparison with one of us?

F. The difference indeed is great; but we agree in the most essential characters of man, and perhaps the advantage is not all on our side. The Hottentot cultivates the earth and rears cattle. He not only herds with his fellows, but he has instituted some sort of government for the protection of the weak against the strong; he has a notion of right and wrong, and is sensible of the necessity of controlling present appetites and passions for the sake of a future good. He has therefore morals.

He is possessed of weapons, tools, clothing, and furniture, of his own making. In agility of body, and the knowledge of various circumstances relative to the nature of animals, he surpasses us. His inferiority lies in those things in which many of the lowest class among us are almost equally inferior to the instructed.

C. But Hottentots have no notion of a God, or of a future state.

F. I am not certain how far that is fact; but, alas! how many among us have no knowledge at all on these subjects, or only some vague notions, full of absurdity and superstition! People far advanced in civilization have entertained the grossest errors on these subjects, which are only to be corrected by the serious application of reason, or by a direct revelation from heaven.

C. You said man was an improvable creature: but have not many nations been a long time in a savage state without improvement?

F. Man is always capable of improvement; but he may exist a long time in society, without actually improving beyond a certain point. There is little improvement among nations who have not the art of writing; for, tradition is not capable of preserving very accurate or extensive knowledge; and many arts and sciences, after flourishing greatly, have been entirely lost in countries which have been overrun by barbarous and illiterate nations. Then there is a principle which I might have mentioned, as one of those that distinguish man from [illegible]utes; but it as much distinguishes some men from others. This is curiosity, or the love of knowledge for its own sake. Most savages have little or nothing of this; but, without it, we should want one of the chief inducements to exert our faculties. It is curiosity that

impels us to search into the properties of every part of nature, to try all sorts of experiments, to visit distant regions, and even to examine the appearances and motions of the heavenly bodies. Every fact thus discovered leads to other facts; and there is no limit to be set to this progress. The time may come, when what we now know may seem as much ignorance to future ages as the knowledge of early times does to us.

C. What nations know the most at present?

F. The Europeans have long been distinguished for superior ardour after knowledge; and they possess beyond all comparison the greatest share of it, whereby they have been enabled to command the rest of the world. The countries, in which the arts and sciences most flourish at present, are the northern and middle parts of Europe, and also North America, which, you know, is inhabited by descendants of Europeans. In these countries man may be said to be most man; and they may apply to themselves the poet's boast:—

"Man is the nobler growth these realms supply,
And souls are opened in our northern sky."

Chapter VI.—PROMISCUOUS PIECES.

Lesson 1.—*On writing a good hand.*

1. The necessity of writing a good hand is enforced by a father, in a letter to his son, in the following strong terms:—

2. A bill for ninety pounds sterling was brought me the other day, said to be drawn upon me by you. I scrupled paying it at first, not on account of the sum,

but because you had sent me no letter of advice, which is always done in those transactions; and still more, because I did not perceive that you had signed it.

3. The person who presented it desired me to look again, and that I should discover your name at the bottom; accordingly I looked again, and, with the help of my magnifying glass, did perceive, that what I had at first taken for somebody's mark, was in truth your name, written in the worst and smallest hand I ever saw in my life.

4. All gentlemen, and all men of business, write their names always in the same way, that their signature may be so well known as not to be easily counterfeited: and they generally sign in rather a larger character than their common hand; whereas your name was in a less and worse character than your common writing.

5. This suggested to me the various accidents which may very probably happen to you, while you write ill. For instance, if you were to write in such a character to the secretary's office, your letter would immediately be sent to the decipherer, as containing matters of the utmost secrecy, not fit to be trusted to the common character.

6. I do not desire that you should write a laboured or stiff character: a man of business must write quick and well, and that depends singly upon use. I would therefore advise you to get some very good master, and apply to writing for a month only, which will be sufficient; for, I assure you, the writing of a genteel plain hand of business is of much more importance than you think.

7. You will say, it may be, that when you write so very ill, it is because you are in a hurry: to which I

answer, Why are you in a hurry? a man of sense may be in haste, but can never be in a hurry; because he knows that whatever he does in a hurry he must necessarily do very ill. He may be in haste to despatch an affair, but he will take care not to let that haste hinder his doing it well.

8. Little minds are in a hurry, when the object proves (as it commonly does) too big for them; they run, they puzzle, confound, and perplex themselves; they want to do everything at once, and never do it at all. But a man of sense takes the time necessary for doing the thing he is about well; and his haste to despatch business only appears by the continuity of his application to it: he pursues it with a cool steadiness, and finishes it before he begins any other.

9. I own your time is much taken up, and you have a great many different things to do; but remember that you had much better do half of them well, and leave the others undone, than do them all indifferently.

10. Moreover, the few seconds that are saved in the course of the day, by writing ill instead of well, do not amount to an object of time by any means equivalent to the disgrace or ridicule of writing an ugly scrawl. Consider, that, if your very bad writing could furnish me with matter of ridicule, it will do so much more to others, who do not view you in that partial light that I do.

LESSON 2.—*Observations on the right method of Reading, in order to obtain general and useful knowledge.*

1. There is no obligation imposed on any one to acquire a knowledge of everything: the short extent of human life, and the limitation of our natural abilities, render such an attempt vain, because impossible.

2. Yet nevertheless, every rational being is under some obligation to improve his understanding; which will otherwise remain a barren desert, or be overrun with weeds and brambles.

3. The common duties of society, which we owe as social beings, oblige all persons whatever to exert their reasoning powers on a multitude of occasions.

4. Every hour of our life calls for some regular exercise of our judgment, concerning persons and actions, times and things; as, without a prudent determination in the affairs we are engaged in, we shall be plunged into perpetual sorrow.

5. There is no person in life, from the lowest order to those placed in the most exalted rank, but has much leisure and many opportunities to cultivate his reason, and to enrich his mind with a variety of knowledge; in order to acquire this, he has nothing more to do than to learn the art of reading.

6. For, it is by reading that we accumulate our personal stock of knowledge; the knowledge of other men, whose attainments have been perpetuated and dispersed in writings.

7. And all that you have to do, to gain profit and advantage from reading, is to read with great attention and deliberation; understand as you go along, and endeavour to improve the truths you read, by remembrance.

8. Without attention in reading, it is impossible to remember: and without remembering, it is time and labour lost to read or learn.

9. Bishop Sanderson, having acquired a large fund of useful knowledge, was once asked how he attained it; the inquirer supposing he must have read a great number of books.

10. The bishop answered, that he had read but very few; but that those authors he had read were well chosen; that he had made them his study, and had never let a single sentence pass without making himself master of the author's meaning.

11. "There are some people," says Dr. Watts, "who never arrive at any deep, solid, or valuable knowledge, in any science or business of life, because they are perpetually fluttering over the surface of things, in endless search of variety; ever inquiring after something that is new, without taking any pains to lay up and preserve the ideas they have gained."

12. Their minds may be compared to a looking-glass, which receives a variety of impressions, without retaining any.

LESSON 3.—*Of Resolution.*

1. Resolution is a grand requisite for the performance of all our duties. It is a virtue we should all possess, even those who command and those who obey.

2. There is a great difference in the manner of obeying and performing every duty. A boy who has resolution will rise as soon as it is time to do so, whether he be sleepy or not.

3. He will apply diligently to his lessons during the hours of study, and not indulge a wish to go to play. Whether hot or cold, thirsty or hungry, he will bear these inconveniences firmly, and not waste his breath in useless complaints.

4. Should he be required to yield his seat to a younger scholar, because his place may be most convenient, he does it without a murmur, although he would have preferred staying where he was.

5. When the hour for bed arrives, he is perhaps not inclined to sleep; but he retires to rest cheerfully, because that is the hour appointed by his master.

6. Thus, with resolution, does a boy perform the duties of youth; and, as this disposition strengthens every day by exertion, he will in a similar manner be enabled to fulfil the enlarged duties of manhood.

7. But, on the contrary, a boy without resolution is sleepy when it is time to rise, turns round, and indulges another slumber. At last he is forced to rise. He goes down yawning: he receives a reproof from his master, which does not correct him; he scarcely hears it.

8. Seated at his lessons for a while, he is asleep; when he is roused, his thoughts turn to play: unaccustomed to restrain them, he cannot check their wandering. Thus unimproved do his hours for study pass.

9. Night being come, he thinks it very hard to go to bed without being sleepy. Murmuring, he retires to his chamber; then devises some method of keeping awake for an hour or two, by contriving some play with the boys in the same room.

10. His days thus unheeded fly, and leave no remembrance of one hour well improved.—This disposition is confirmed by habit; therefore, in the same listless and useless manner will he probably pass his life.

LESSON 4.—*The Boy without a Genius.*

1. Mr. Wiseman, the schoolmaster, received a new scholar with the following letter:—

2. "This will be delivered to you by my son Samuel, whom I beg leave to commit to your care; hoping that by your well-known skill and attention, you will be able to make something of him; which, I am sorry to say,

none of his masters has hitherto done. He is now eleven, and yet can do nothing but read his mother-tongue, and that but indifferently.

3. "We sent him at seven to a grammar-school in our neighbourhood; but his master soon found that his genius was not turned to learning languages. He was then put to writing, but he set about it so awkwardly that he made nothing of it. He was tried at accounts, but it appeared that he had no genius for that. He could do nothing in geography for want of memory.

4. "In short, if he has any genius at all, it does not yet show itself. But I trust to your experience in cases of this nature, to discover what he is fit for, and to instruct him accordingly. I beg to be favoured shortly with your opinion about him."

5. When Mr. Wiseman had read this letter, he shook his head, and said to his assistant, "A pretty subject they have sent us here! a lad that has a great genius for nothing at all. But perhaps my friend Mr. Acres expects that a boy should show a genius for a thing before he knows anything about it—no uncommon error! Let us see, however, what the youth looks like. I suppose he is a human creature, at least."

6. Master Samuel Acres was now called in. He came hanging down his head, as if he were going to be flogged. "Come hither," said Mr. Wiseman; "stand by me, and do not be afraid: nobody will hurt you. How old are you?" "Eleven last May, sir."

7. "A well-grown boy of your age, indeed. You love play, I dare say." "Yes, sir." "What, are you a good hand at marbles?" "Pretty good, sir." "And can spin a top, and drive a hoop, I suppose?" "Yes, sir."

8. "Can you write, Samuel?" "I learned a little,

sir, but I left it off again." "And why so?" "Because I could not make the letters." "No! why, how do you think other boys do? have they more fingers than you?" "No, sir." "Are you not able to hold a pen as well as a marble?" Samuel was silent.

9. "Let me look at your hand." Samuel held out both his paws like a dancing bear. "I see nothing here to hinder you from writing as well as any boy in the school. You can read, I suppose." "Yes, sir." "Tell me, then, what is written over the school-room door." Samuel with some hesitation read, WHATEVER MAN HAS DONE, MAN MAY DO.

LESSON 5.—*The Boy without a Genius, (continued.)*

1. "Pray how did you learn to read? Was it not with taking pains?" "Yes, sir." "Well, taking more pains will enable you to read better. Do you know anything of the Latin grammar?" "No, sir."

2. "Have you never learned it?" "I tried, sir, but I could not get it by heart." "Why, you can say some things by heart. I dare say you can tell me the names of the days of the week in their order." "Yes, sir, I know them." "And the months in the year perhaps?" "Yes, sir."

3. "And you could probably repeat the names of your brothers and sisters, and all your father's servants, and half the people in the village besides?" "I believe I could, sir." "Well, and is the grammar more difficult to remember than these?" Samuel was silent.

4. "Have you learned anything of accounts?" "I went into Addition, sir, but I did not go on with it." "Why so?" "I could not do it, sir."

5. "How many marbles can you buy for a penny?" "Twelve new ones, sir." "And how many for a half-penny?" "Six, sir." "And how many for two pence?" "Twenty-four."

6. "If you were to have a penny a day, what would that make in a week?" "Seven pence." "But, if you paid two pence out of that, what would you have left?" Samuel studied a while, and then said, "Five pence." "Right. Why here you have been practising the four great rules of arithmetic, Addition, Subtraction, Multiplication, and Division. Learning accounts is no more than this.

7. "Well, Samuel, I see what you are fit for. I shall set you about nothing but what you are able to do; but, observe, you must do it. We have no *I can't* here. Now go among your schoolfellows."

8. Samuel went away, glad that his examination was over, and with more confidence in his powers than he had felt before.

9. The next day he began business. A boy less than himself was called out to set him a copy of letters, and another was appointed to hear him grammar. He read a few sentences in English, that he could perfectly understand, to the master himself. Thus, by going on steadily and slowly, he made a sensible progress.

LESSON 6.—*The Boy without a Genius, (concluded.)*

1. Samuel had already joined his letters, got all the declensions perfectly, and half the multiplication table, when Mr. Wiseman thought it time to answer his father's letter; which he did as follows:—

2. "I now think it right to give you some informa-

tion concerning your son. You perhaps expected it sooner; but I always wish to avoid hasty judgments.

3. "You mentioned in your letter that it had not been discovered which way his genius pointed. If by genius you mean such a decided bent of mind to any one pursuit as will lead to excellence with little or no labour or instruction, I must say that I have not met with such a quality in more than three or four boys in my life; and your son is certainly not among the number.

4. "But, if you mean only the ability to do some of those things which the greater part of mankind can do, when properly taught, I can affirm that I find in him no peculiar deficiency. And, whether you choose to bring him up to trade or to some practical profession, I see no reason to doubt that he may in time become sufficiently qualified for it.

5. "It is my favourite maxim, sir, that everything most valuable in this life may generally be acquired by taking pains for it. Your son has already lost much time in the fruitless expectation of finding out what he would take up of his own accord.

6. "Believe me, sir, few boys will take up anything of their own accord but a top or a marble. I will take care that, while he is with me, he loses no more time this way, but is employed about things that are fit for him, not doubting that we shall find him fit for them."

7. Though the doctrine of this letter did not perfectly agree with Mr. Acres's notions, yet, being convinced that Mr. Wiseman was more likely to make something of his son than any of his former preceptors, he continued him at his school for some years, and had the satisfaction to find him going on in a steady course of gradual improvement.

8. In due time a profession was chosen for him, which seemed to suit his temper and talents, but for which he had no particular turn, having never thought at all about it. He made a respectable figure in it, and went through the world with credit and usefulness, though without a genius.

LESSON 7.—*True Heroism.*

1. Every one has read the stories of Achilles, and Alexander of Macedon, and Charles of Sweden, and every one has, I doubt not, admired the high courage which seemed to set them above all sensations of fear, and rendered them capable of the most extraordinary actions.

2. The world calls these men *heroes* but, before we give them that noble appellation, let us consider what were the motives which animated them to act and suffer as they did.

3. The first was a ferocious savage, governed by the passions of anger and revenge, in gratifying which, he disregarded all impulses of duty and humanity.

4. The second was intoxicated with the love of glory, swollen with absurd pride, and enslaved by dissolute pleasures, and in pursuit of these objects he reckoned the blood of millions as of no account.

5. The third was unfeeling, obstinate, and tyrannical; and preferred ruining his country, and sacrificing all his faithful followers, to the humiliation of giving up any of his mad projects. *Self*, you see, was the spring of all their conduct; and a selfish man can never be a hero.

6. I will give you an example of genuine heroism, shown in actions which benefited mankind: and this shall be *a true story*, which is perhaps more than can be said of half that is recorded of Achilles and Alexander.

7. You have probably heard something of Mr. Howard, the reformer of prisons, to whom a monument is erected in St. Paul's church. His whole life almost was heroism; for he confronted all sorts of dangers, with the sole view of relieving the miseries of his fellow creatures.

8. When he began to examine the state of prisons, scarcely any in the country was free from a very fatal and infectious distemper, called the gaol fever. Wherever he heard of it, he made a point of seeing the poor sufferers, and often went down into their dungeons, when the keepers themselves would not accompany him.

9. He travelled several times over almost the whole of Europe, and even into Asia, in order to gain knowledge of the state of prisons and hospitals, and point out means for lessening the calamities that prevail in them.

10. He even went into countries where the plague was, that he might learn the best methods of treating that terrible contagious disease; and he voluntarily exposed himself to perform a strict quarantine, as one suspected of having the infection of the plague, only that he might be thoroughly acquainted with the methods used for prevention.

11. He at length died of a fever, caught in attending on the sick on the borders of Crim Tartary, honoured and admired by all Europe, after having greatly contributed to enlighten his own and many other countries with respect to some important objects of humanity.

12. Such was *Howard the Good;* as great a hero in preserving mankind as some of the false heroes above mentioned were in destroying them.

LESSON 8.—*Poor Richard, or, the Way to Wealth.*

1. As I was riding out one day for pleasure, I saw a great number of people collected together at an auction of merchants' goods, where I stopped and made one of the number.

2. The hour of sale not being come, they were conversing on the badness of the times; and one of the company called to a plain, clean, old man, with white locks, "Pray, Father Abraham, what think you of the times? Will not those heavy taxes quite ruin the country? How shall we be ever able to pay them? What would you advise us to do?"

3. Father Abraham stood up, and replied, "If you would have my advice, I will give it you in short; for, 'A word to the wise is enough,' as Poor Richard says."

4. They joined in desiring him to speak his mind; and gathering round him, he proceeded as follows:—

5. "Friends," said he, "the taxes are indeed very heavy; and if those laid on by the government were the only ones we had to pay, we might more easily discharge them; but we have many others, and much more grievous to some of us.

6. "We are taxed twice as much by our idleness, three times as much by our pride, and four times as much by our folly: and from these taxes the *commissioners* cannot ease or deliver us, by allowing any abatement.

7. "However, let us hearken to good advice, and something may be done for us: 'God helps them that help themselves,' as Poor Richard says.

8. "It would be thought a hard government that should tax its people one tenth part of their time to be employed in its service; but idleness taxes many of us

much more: and sloth, by bringing on diseases, absolutely shortens life.

9. "'Sloth, like rust, consumes faster than labour wears; while the key used is always bright,' as Poor Richard says. 'But dost thou love life? then do not squander time; for, that is the stuff life is made of,' as Poor Richard says.

10. "How much more time than is necessary do we spend in sleep! forgetting that 'the sleeping fox catches no poultry;' and that 'there will be sleep enough in the grave,' as Poor Richard says.

LESSON 9.—*Poor Richard, or, the Way to Wealth, (continued.)*

1. "If time be of all things the most precious, wasting time must be (as Poor Richard says) 'the greatest *prodigality*,' since, as he elsewhere tells us, 'lost time is never found again; and what we call time enough always proves little enough.'

2. "Let us then up and be doing, and doing to the purpose; so by diligence shall we do more with less perplexity.

3. "'Sloth makes all things difficult, but industry all easy,' as Poor Richard says: and he that riseth late must trot all day, and shall scarce overtake his business at night; while laziness travels so slowly that poverty soon overtakes him: and Poor Richard adds, 'Drive thy business, let not that drive thee;' and,

> 'Early to bed and early to rise,
> Makes a man healthy, wealthy, and wise.'

4. "So what signifies wishing and hoping for better times? We may make these times better, if we bestir ourselves. 'Industry need not wish,' as Poor Richard

says; and 'He that lives upon hope will die fasting. There are no gains without pains; then help hands, for I have no lands; or, if I have, they are smartly taxed: and he that hath a trade hath an estate; and he that hath a calling hath an office of profit and honour,' as Poor Richard says: but then the trade must be worked at, and the calling well followed, or neither the estate nor the office will enable us to pay our taxes.

5. "If we are industrious we shall never starve; for, 'at the workman's house hunger looks in, but dares not enter.' Nor will the *bailiff* or the constable enter, for, 'Industry pays debts, while despair increaseth them.'

6. "What though you have found no treasure, nor has any rich relation left you a legacy? 'Diligence is the mother of good luck, and God gives all things to industry.'

'Then plough deep, while sluggards sleep,
And you shall have corn, to sell and to keep.'

7. "Work while it is called to-day, for you know not how much you may be hindered to-morrow. 'One to-day is worth two to-morrows,' as Poor Richard says; and farther, 'Never leave that till to-morrow which you can do to-day.'

8. "If you were a servant, would you not be ashamed that a good master should catch you idle? Are you then your own master? Be ashamed to catch yourself idle, when there is so much to be done, for yourself, your family, your country, and your king.

9. "It is true there is much to be done, and perhaps you are weak-handed; but stick to it steadily, and you will see great effects: for, 'Constant dropping wears away stones: and by diligence and patience the mouse ate in two the cable; and little strokes fell great oaks.'

LESSON 10.—*Poor Richard, or, the Way to Wealth, (continued.)*

1. "Methinks I hear some of you say, Must a man afford himself no leisure? I will tell thee, my friend, what poor Richard says; 'Employ thy time well, if thou meanest to gain leisure: and, since thou art not sure of a minute, throw not away an hour.'

2. "Leisure is time for doing something useful: this leisure the diligent man will obtain, but the lazy man never; for, 'A life of leisure and a life of laziness are two things.'

3. "Many, without labour, would live by their wits only, but they break for want of stock; whereas industry gives comfort, plenty, and respect. 'Flee from pleasures, and they will follow you. The diligent spinner has a large shift; and, Now I have a sheep and a cow, everybody bids me good-morrow.'

4. "But with our industry we must likewise be steady, settled, and careful, and oversee our own affairs with our own eyes, and not trust too much to others; for, as Poor Richard says,

> 'I never saw an oft-moved tree,
> Nor yet an oft-moved family,
> That throve so well as those that settled be.'

5. "And again, 'Three removes are as bad as a fire.' 'Keep thy shop, and thy shop will keep thee.' 'If you would have your business done, go; if not, send.' And,

> 'He that by the plough would thrive,
> Himself must either hold or drive.'

6. "'The eye of the master will do more work than both his hands.' 'Want of care does us more damage than want of knowledge.' And again, 'Not to oversee workmen, is to leave them your purse open.'

7. "Trusting too much to others' care is the ruin of many; for, 'in the affairs of this world, men are saved, not by faith, but by the want of it;' but 'a man's own care is profitable;' for, 'If you would have a faithful servant, and one that you like,—serve yourself.'

8. "A little neglect may breed great mischief: 'For want of a nail the shoe was lost; for want of a shoe the horse was lost; and for want of a horse the rider was lost,' being overtaken and slain by the enemy; all for want of a little care about a horse-shoe nail."

LESSON 11.—*Poor Richard, or, the Way to Wealth, (continued.)*

1. "So much for industry, my dear friends, and attention to one's own business; but, to these we must add *frugality*, if we would make our industry more certainly successful. A man may, if he know not how to save as he gets, 'keep his nose all his life to the grindstone, and die not worth a groat at last.'

2. "'A fat kitchen makes a lean will;' and,

'Many estates are spent in the getting,
Since women for tea forsook spinning and knitting,
And men for punch forsook hewing and splitting.'

3. "If you would be wealthy, think of saving as well as of getting. The Indies have not made Spain rich, because her outgoings are greater than her incomes.

4. "Away then with your expensive follies, and you will not have much cause to complain of hard times, heavy taxes, and chargeable families; for,

'Women and wine, game and deceit,
Make the wealth small, and the want great.'

5. "And farther, 'What maintains one vice, would bring up two children.' You may think, perhaps, that

a little tea, or a little punch now and then, diet a little more costly, clothes a little fine, and a little entertainment now and then, can be no great matter; but remember, 'many a little makes a mickle;' and farther, 'Beware of little expenses; a small leak will sink a great ship; and again, 'Who dainties love, shall beggars prove;' and moreover, 'Fools make feasts, and wise men eat them.'

6. "Here you are all got together to this sale of fineries and nicknacks. You call them goods; but, if you do not take care, they will prove evils to some of you.

7. "You expect they will be sold cheap; and perhaps they may for less than they cost; but, if you have no occasion for them, they must be dear to you. Remember what Poor Richard says, 'Buy what thou hast no need of, and ere long thou shalt sell thy necessaries.'

8. "And again, 'At a great pennyworth pause awhile.' He means, that perhaps the cheapness is apparent only, and not real; or the bargain, by straitening thee in thy business, may do thee more harm than good.

9. "For, in another place, he says, 'Many have been ruined by buying good pennyworths.' And it is foolish to lay out money in a purchase of repentance; and yet this folly is practised every day at auctions, for want of minding the almanack.

10. "Many, for the sake of finery on the back, have gone with a hungry belly, and half-starved their families. 'Silks and satins, scarlet and velvets, put out the kitchen fire,' as Poor Richard says.

11. "These are not the necessaries of life; they can scarcely be called the conveniences; and yet, only because they look pretty, how many wish to have them!"

LESSON 12.—*Poor Richard, or, the Way to Wealth, (continued.)*

1. "By these and other extravagances the genteel are reduced to poverty, and forced to borrow of those whom they formerly despised, but who, through industry and frugality, have maintained their standing: in which case it appears plainly, that 'A ploughman on his legs is higher than a gentleman on his knees,' as Poor Richard says.

2. "Perhaps they have had a small estate left them, which they knew not the getting of: they think it is day, and it will never be night; that a little to be spent out of so much is not worth minding; but, 'Always taking out of a meal-tub, and never putting in, soon comes to the bottom,' as Poor Richard says; and then, 'When the well is dry, they know the worth of water.'

3. "But this they might have known before, if they had taken his advice. 'If you would know the value of money, go and try to borrow some; for, he that goes to borrowing, goes to sorrowing,' as Poor Richard says; and indeed so does he that lends to such people, when he goes to get it again. Poor Dick farther advises and says,

'Fond pride of dress is sure a very curse;
Ere fancy you consult, consult your purse.'

4. "And again, 'Pride is as loud a beggar as want, and a great deal more saucy.' When you have got one fine thing, you must buy ten more that your appearance may be all of a piece; but Poor Dick says, 'It is easier to suppress the first desire than to satisfy all that follow it.' And it is as truly folly for the poor to ape the rich, as for the frog to swell in order to equal the ox.

'Vessels large may venture more,
But little boats should keep near shore.'

5. "It is, however, a folly soon punished; for, as Poor Richard says, 'Pride that dines on vanity, sups on contempt. pride breakfasted with plenty, dined with poverty, and supped with infamy.'

6. "And after all, of what use is the pride of appearance, for which so much is risked, so much is suffered? it cannot promote health, nor ease pain; it makes no increase of merit in the person; it creates envy, it hastens misfortune.

7. "But what madness it must be to run in debt for these superfluities! We are offered, by the terms of this sale, six months' credit; and that, perhaps, has induced some of us to attend it; because we cannot spare the ready money, and hope now to be fine without it. But ah! think what you do when you run in debt; you give to another, power over your liberty.

8. "If you cannot pay at the time, you will be ashamed to see your creditor; you will be in fear when you speak to him; you will make poor, pitiful, sneaking excuses, and by degrees come to lose your veracity, and sink into base, downright lying; for, 'The second vice is lying, the first is running in debt,' as Poor Richard says; and again, to the same purpose, 'Lying rides upon debts's back; whereas a freeborn Englishman ought not to be ashamed nor afraid to see, or to speak to any man living. But poverty often deprives a man of all spirit and virtue.' 'It is hard for an empty bag to stand upright.'

9. "What would you say of that government which should forbid you to dress like a gentleman or gentlewoman, on pain of imprisonment or servitude? Would you not say that you are free, have a right to dress as you please, and that such an edict would be a breach of your privileges, and such a government tyrannical?

10. "And yet you are about to put yourself under that tyranny when you run in debt for dress, or the like. Your creditor has authority, at his pleasure, to deprive you of your liberty, by confining you in a gaol for life, or by selling you for a servant, if you should not be able to pay him."

LESSON 13.—*Poor Richard, or, the Way to Wealth, (concluded)*

1. "When you have got your bargain, you may perhaps think little of payment, but, as Poor Richard says, 'Creditors have better memories than debtors; creditors are a superstitious sect, great observers of days and times.'

2. "The day comes round before you are aware, and the demand is made before you are prepared to satisfy it; or, if you bear your debt in mind, the term, which at first seemed so long, will as it lessens appear extremely short.

3. "At present perhaps you may think yourselves in thriving circumstances, and that you can bear a little extravagance without injury; but

> 'For age and want save while you may,
> No morning sun lasts a whole day'

4. "Gain is uncertain; but ever, while you live, remember that expense is constant and certain; and 'It is easier to build two chimneys than to keep one in fuel,' as Poor Richard says. So 'rather go to bed supperless than rise in debt.'

> 'Get what you can, and what you get hold;
> But do it honestly and fairly—if you get gold.

5. "This doctrine, my friends, is reason and wisdom; but, after all, do not depend too much upon your own

industry, frugality, and prudence, though excellent things; for they might all be blasted without the blessing of Heaven; and therefore ask that blessing humbly, and be not uncharitable to those who at present seem to want it, but comfort and help them.

6. "And now, to conclude, 'Experience keeps a dear school, but fools will learn in no other,' as Poor Richard says, and scarcely in that; for, it is true, 'We may give advice, but we cannot give conduct.'

7. "However, remember this, 'They that will not be counselled, cannot be helped;' and farther, 'If you will not hear Reason, she will surely rap your knuckles,' as Poor Richard says."

8. Thus the old gentleman ended his harangue. The people heard it, and approved the doctrine, and immediately practised the contrary; for, the auction opened, and they began to buy extravagantly, notwithstanding all his cautions, and their own fear of taxes.

Lesson 14.—*The Supreme Ruler of the World.*

1. Many kingdoms and countries full of people, and islands, and large continents, and different climes, make up this whole world. God governs it.

2. The people swarm upon the face of it like ants upon a hillock.

3. Some cover themselves with furs against the sharp cold; some experience the utmost warmth of the sun's rays: some drink of the fruit of the vine; some the pleasant milk of the cocoanut; and others quench their thirst with the running stream.

4. All are God's family: he knows every one of them, as a shepherd knows his flock.

5. They pray to him in different languages, but he understands them all; he hears them all; he takes care of all; none are so great that he cannot punish them; none are so mean that he will not protect them.

6. Negro woman, who sittest pining in captivity, and weepest over thy sick child; though no one sees thee, God sees thee; though no one pities thee, God pities thee.

7. Raise thy voice, forlorn and abandoned one; call upon him from amidst thy bonds; for assuredly he will hear thee.

8. Monarch, that rulest over a hundred states, whose frown is terrible as death, and whose armies cover the land, boast not thyself as though there were none above thee.

9. God is above thee, his powerful arm is always over thee, and, if thou doest ill, assuredly he will punish thee.

10. Nations of the earth, fear the Lord; families of men, call upon the name of God. Is there any one whom God hath not made? let him not worship him. Is there any one whom he hath not blessed? let him not praise him.

Lesson 15.—*The Whistle.*

1. When I was a child about seven years of age, my friends, on a holiday, filled my pocket with halfpence. I went directly toward a shop where toys were sold for children; and, being charmed with the sound of a whistle that I met by the way in the hands of another boy, I voluntarily offered him all my money for it.

2. I then came home, and went whistling over the house, much pleased with my whistle, but disturbing all the family.

3. My brothers and sisters and cousins, understanding the bargain I had made, told me I had given four times as much for it as it was worth. This put me in mind what good things I might have bought with the rest of the money: and they laughed at me so much for my folly, that I cried with vexation.

4. My reflections on the subject gave me more chagrin than the whistle gave me pleasure.

5. This little event however was afterwards of use to me, the impression continuing on my mind: so that often, when I was tempted to buy some unnecessary thing, I said to myself, 'Do not give too much for the whistle;' and so I saved my money.

6. As I grew up, came into the world, and observed the actions of men, I thought I met with many, very many, who gave too much for their whistle.

7. When I saw any one too ambitious of court favour, sacrificing his time in attendance on levees, his repose, his liberty, his virtue, and perhaps his friends, to attain it; I said to myself, 'This man gives too much for his whistle.'

8. When I saw another fond of popularity, constantly employing himself in political bustles, neglecting his own affairs, and ruining them by that neglect; 'He pays indeed,' said I, 'too much for his whistle.'

9. If I knew a miser, who gave up every kind of comfortable living, all the pleasure of doing good to others, all the esteem of his fellow citizens, and the joys of benevolent friendship, for the sake of accumulating wealth; 'Poor man!' said I, 'you indeed pay too much for your whistle.'

10. When I met a man of pleasure, sacrificing every laudable improvement of mind or of fortune to mere

sensual gratifications; 'Mistaken man!' said I, 'you are providing pain for yourself instead of pleasure; you give too much for your whistle.'

11. If I saw one fond of fine clothes, fine furniture, fine equipage, all above his fortune, for which he contracted debts, and ended his career in prison; 'Alas!' said I, 'he has paid dear, very dear, for his whistle.'

12. In short, I conceived that great part of the miseries of mankind are brought upon them by the false estimate they make of the value of things, and by their giving too much for their whistle.

LESSON 16.—*Anecdote of Mungo Park.*

1. Mr. Mungo Park was one of the first enterprising travellers who attempted to explore the uncultivated parts of Africa, in order to gain a knowledge of the inhabitants, and open a way for their civilization.

2. At a moment when he seemed bereft of all human help, he drew consolation from a train of reflections, of which the origin would appear, to many thoughtless inattentive persons, trifling and insignificant.

3. He had just been met, and plundered of every convenience he had provided for his accommodation during his long and dangerous journey, by a horde of the untaught savages who dwell in those deserts; and was left in the most forlorn situation imaginable, which he describes in such an affecting manner, that I shall quote his own words.

4. "Whichever way I turned," says he, "I saw myself in the midst of a vast wilderness, in the depth of the rainy season, naked and alone, surrounded by savage animals, and by men still more savage. I was five hundred miles from any European settlement.

5. "All these circumstances crowded at once on my recollection; and I confess that my spirits began to fail me. I considered my fate as certain, and that I had no alternative but to lie down and perish."

6. In such deplorable circumstances there seemed indeed but little room for hope; but, the traveller adds, "The influence of religion, however, aided and supported me. I reflected, that no human prudence or foresight could possibly have averted my present sufferings. I was a stranger in a strange land; yet I was still under the protecting eye of that Providence, who has condescended to call himself the stranger's friend.

7. "At this moment, painful as my reflections were, the extraordinary beauty of a small moss in fructification irresistibly caught my attention.

8. "I mention this, to show from what trifling circumstances the mind will sometimes derive consolation; for, though the whole plant was not longer than the top of one of my fingers, I could not contemplate the delicate conformation of its roots, leaves, and capsula, without admiration.

9. "Can that Being, thought I, who planted, watered, and brought to perfection, in this obscure part of the world, a thing which appears of so small importance, look with unconcern upon the situation and sufferings of creatures formed after his own image? Surely not!

10. "Reflections like these would not allow me to despair. I started up, disregarding both hunger and fatigue; travelled forwards, assured that relief was at hand: and I was not disappointed."

11. If this man had had no faith in the providence of God, it is most probable that he would have fallen a victim to despair; and, had he not been in the habit of

admiring the objects of creation, it is hardly likely he would have seen the moss which suggested those ideas, that gave him fortitude to use the means of overcoming his difficulties.

12. From this striking instance of deliverance we may learn, that there is no situation so deplorable as to exclude hope or reasonable exertions, which, under the Divine blessing, may change the gloomiest prospects into sunshine.

LESSON 17.—*The Hospitable Negro Woman.*

1. Mungo Park, the enterprising traveller before mentioned, was employed by the African Association to explore the interior regions of Africa. In this hazardous undertaking he encountered many dangers and difficulties.

2. His wants were often supplied, and his distresses alleviated, by the kindness and compassion of the negroes. He gives the following lively and interesting account of the hospitable treatment he received from a poor negro woman.

3. "Being arrived at Sego, the capital of the kingdom of Bambarra, situated on the banks of the Niger, I wished to pass over to that part of the town in which the king resides: but, from the number of persons eager to obtain a passage, I was under the necessity of waiting two hours.

4. "During this time, the people who had crossed the river carried information to Mansong, the king, that a white man was waiting for a passage, and was coming to see him.

5. "He immediately sent over one of his chief men, who informed me that the king could not possibly see

me, until he knew what had brought me into his country; and that I must not presume to cross the river without the king's permission.

6. "He therefore advised me to lodge for that night at a distant village to which he pointed; and said that in the morning he would give me further instructions how to conduct myself.

7. "This was very discouraging. However, as there was no remedy, I set off for the village; where I found to my great mortification that no person would admit me into his house.

8. "From prejudices infused into their minds, I was regarded with astonishment and fear; and was obliged to sit the whole day without victuals in the shade of a tree."

LESSON 18.—*The Hospitable Negro Woman, (concluded.)*

1. "The night threatened to be very uncomfortable; for, the wind rose, and there was great appearance of a heavy rain: the wild beasts too were so numerous in the neighbourhood, that I should have been under the necessity of climbing up a tree, and resting among the branches.

2. "About sunset, however, as I was preparing to pass the night in this manner, and had turned my horse loose, that he might graze at liberty, a negro woman, returning from the labours of the field, stopped to observe me; and, perceiving that I was weary and dejected, inquired into my situation.

3. "I briefly explained it to her; after which, with looks of great compassion, she took up my saddle and bridle, and told me to follow her.

4. "Having conducted me into her hut, she lighted

a lamp, spread a mat on the floor, and told me I might remain there for the night.

5. "Finding that I was very hungry, she went out to procure me something to eat, and returned in a short time with a very fine fish, which, having caused it to be half broiled upon some embers, she gave me for supper.

6. "The rites of hospitality being thus performed toward a stranger in distress, my worthy benefactress (pointing to the mat, and telling me I might sleep there without apprehension,) called to the female part of her family, who had stood gazing on me all the while in fixed astonishment, to resume their task of spinning cotton; in which they continued to employ themselves great part of the night.

7. "They lightened their labour by songs, one of which was composed extempore, for I was myself the subject of it. It was sung by one of the young women, the rest joining in a sort of chorus.

8. "The air was sweet and plaintive, and the words, literally translated, were these: 'The winds roared, and the rains fell.—The poor white man, faint and weary, came and sat under our tree.—He has no mother to bring him milk; no wife to grind his corn. *Chorus:* Let us pity the white man; no mother has he to bring him milk; no wife to grind his corn.'

9. "Trifling as these events may appear to the reader, they were to me affecting in the highest degree. I was oppressed by such unexpected kindness; and sleep fled from my eyes.

10. "In the morning I presented to my compassionate landlady two of the four brass buttons which remained on my waistcoat; the only recompense it was in my power to make her."

LESSON 19.—*Industry better than Gold.*

1. About the time that many people went over to South America, with the hope of finding gold and silver, there was a Spaniard, whose name was Pizarro, who had a great inclination to try his fortune like the rest.

2. But, as he had an elder brother, for whom he had a very great affection, he went to him, told him his design, and solicited him very much to go along with him, promising him that he should have an equal share of all the riches they found.

3. The brother, whose name was Alonzo, was a man of a contented temper, and a good understanding; he did not therefore much approve of the project, and endeavoured to dissuade Pizarro from it, by setting before him the danger to which he exposed himself, and the uncertainty of his succeeding.

4. But, finding all that he said was in vain, he agreed to go with him; but told him at the same time, that he wanted no part of the riches which he might find, and would ask no other favour than to have his baggage and a few servants taken on board the vessel with him.

5. Pizarro then sold all that he had, bought a vessel, and embarked with several other adventurers, who had all great expectations, like himself, of soon becoming rich.

6. As to Alonzo, he took nothing with him but a few ploughs, harrows, and other tools, and some corn, together with a large quantity of potatoes, and some seeds of different vegetables. Pizarro thought this a very odd preparation for the voyage; but, as he did not think proper to expostulate with his brother, he said nothing.

7. After sailing some time with prosperous winds, they put into the last port where they were to stop, before they came to the country where they were to search for gold.

8. Here Pizarro bought a great number more of pick-axes, shovels, and various other tools for digging, melting, and refining the gold he expected to find, besides hiring an additional number of labourers to assist him in the work. Alonzo, on the contrary, bought only a few sheep, and four stout oxen, with their harness, and food enough to subsist them till they should arrive at land.

9. As it happened, they met with a favourable voyage, and all landed in perfect health in America. Alonzo then told his brother that, as he had only come to accompany and serve him, he would stay near the shore, with his servants and cattle, while he went to search for gold; and, when he had acquired as much as he desired, should be always ready to embark for Spain with him.

LESSON 20.—*Industry better than Gold, (continued.)*

1. Pizarro accordingly set out, not without feeling so great a contempt for his brother, that he could not help expressing it to his companions.

2. "I always thought," said he, "that my brother was a man of sense; he bore that character in Spain: but I find people were strangely mistaken in him. Here he is going to divert himself with his sheep and oxen, as if he were living quietly upon his farm at home, and had nothing else to do than to raise cucumbers and melons.

3. "But we know better what to do with our time; so, come along, my lads; and, if we have but good luck, we shall soon be enriched for the rest of our lives."

4. All that were present applauded Pizarro's speech, and declared themselves ready to follow him wherever he went: only one old Spaniard shook his head as he went, and told him, he doubted whether he would find his brother so great a fool as he thought.

5. They then travelled on, several days' march, into the country; sometimes obliged to cross rivers; at others, to pass mountains and forests, where they could find no paths; sometimes scorched by the violent heat of the sun, and then wetted to the skin by violent showers of rain.

6. These difficulties however did not discourage them so much as to hinder them from trying in several places for gold, which they were at length lucky enough to find in a considerable quantity.

7. This success animated them very much; and they continued working upon that spot till all their provisions were consumed; they gathered daily large quantities of ore; but then they suffered very much from hunger. Still however they persevered in their labours, and sustained themselves with such roots and berries as they could find.

8. At last even this resource failed them; and, after several of their company had died from want and hardship, the rest were just able to crawl back to the place where they had left Alonzo, carrying with them the gold, to acquire which they had suffered so many miseries.

9. But, while they had been employed in this manner, Alonzo, who foresaw what would happen, had been industriously toiling to a very different purpose. His skill in husbandry had easily enabled him to find a spot, of considerable extent, and very fertile soil, which he ploughed up with the oxen he had brought with him, and the assistance of his servants.

10. He then sowed the different seeds he had brought; and planted the potatoes, which prospered beyond what he could have expected, and yielded him a most abundant harvest. His sheep he had turned out in a very

fine meadow near the sea; and every one of them had brought him a couple of lambs.

11. Beside that, he and his servants, at leisure times, employed themselves in fishing; and the fish they had caught were all dried, and salted with salt they had found upon the sea shore; so that, by the time of Pizarro's return, they had laid up a very considerable quantity of provisions.

LESSON 21.—*Industry better than Gold, (concluded.)*

1. When Pizarro returned, his brother received him with the greatest cordiality, and asked him what success he had had. Pizarro told him that they had found an immense quantity of gold; but that several of his companions had perished, and that the rest were almost starved from the want of provisions.

2. He then requested his brother would immediately give him something to eat, as he assured him he had tasted no food for the last two days, excepting the roots and bark of trees.

3. Alonzo then very coolly answered, that he should remember that, when they set out, they made an agreement that neither should interfere with the other; that he had never desired to have any share of the gold which Pizarro might acquire, and therefore he wondered that Pizarro should expect to be supplied with the provisions that he had procured with so much care and labour.

4. "But," added he, "if you choose to exchange some of the gold you have found for provisions, I shall perhaps be able to accommodate you."

5. Pizarro thought this behaviour very unkind in his brother; but, as he and his companions were almost starved, they were obliged to comply with his demands;

which were so exorbitant, that in a very short time they parted with all the gold they had brought with them, merely to purchase food.

6. Alonzo then proposed to his brother to embark for Spain in the same vessel which had brought them thither, as the wind and weather seemed to be most favourable.

7. But Pizarro, with an angry look, told him that, since he had deprived him of everything he had gained, and treated him in so unfriendly a manner, he should go without him; for, as to himself, he would rather perish upon that desert shore than embark with so inhuman a brother.

8. Alonzo, instead of resenting these reproaches, embraced his brother with the greatest tenderness, and spoke to him in the following manner:—

9. "Could you then believe, my dearest Pizarro, that I really meant to deprive you of the fruits of all your labours, which you have acquired with so much toil and danger? Rather may all the gold in the universe perish, than that I should be capable of such behaviour to my dearest brother!

10. "But I saw the rash impetuous desire you had for riches, and wished to correct this fault in you, and serve you at the same time. You have now learned that, without that foresight and industry which you despised, all the gold you have brought with you would not have prevented you from perishing miserably. Take back therefore your riches, of which I hope you have now learned to make a proper use."

11. Pizarro was equally filled with gratitude and astonishment at this generosity of his brother; and he acknowledged, from experience, that industry was better than gold.

12. They then embarked for Spain, where they all safely arrived. During the voyage, Pizarro often solicited his brother to accept of half his riches, which Alonzo constantly refused, telling him, that he who could raise food enough to maintain himself was in no want of gold.

Lesson 22.—*Anecdotes of the Dog.*

1. A grocer in Edinburgh had a dog, which for some time amused and astonished the people in the neighbourhood.

2. A man who went through the streets, ringing a bell and selling penny pies, happened one day to treat this dog with a pie. The next time he heard the pieman's bell, the dog ran to him with impetuosity, seized him by the coat, and would not suffer him to pass.

3. The pieman, who understood what the animal wanted, showed him a penny, and pointed to his master, who stood at the street door, and saw what was going on.

4. The dog immediately supplicated his master by many humble gestures and looks. The master put a penny into the dog's mouth, which he instantly delivered to the pieman, and received his pie; and this traffic between the pieman and the grocer's dog continued to be daily practised for some months.

5. At a convent in France, twenty paupers were served with a dinner at a certain hour every day. A dog belonging to the convent did not fail to be present at this regale, to receive the scraps which were now and then thrown to him.

6. The guests, however, were poor and hungry, and of course not very wasteful; so that their pensioner did little more than scent the feast, which he would fain have devoured.

7. The portions were served by a person at the ringing of a bell, and delivered out by means of what in religious houses is called a *rundle*, a machine like a cask with some of the staves taken out, that, by turning round upon a pivot, placed in an opening in the wall, carries whatever is placed on one side to the other side, without allowing the person inside and the person outside to see each other.

8. One day, this dog, which had received only a few scraps, waited till the paupers were all gone, took the rope in his mouth, and rang the bell.

9. His stratagem succeeded. He repeated it the next day with the same good fortune.

10. At length the cook, finding that twenty-one portions were given out instead of twenty, was determined to discover the trick: in doing which he had no great difficulty; for, lying in wait, and noticing the paupers as they came for their different portions, and that there was no intruder except the dog, he began to suspect the truth; which he was confirmed in, when he saw the animal stay with great deliberation till the visitors were all gone, and then pull the bell.

11. The matter was related to the community; and, to reward him for his ingenuity, the dog was permitted to ring the bell every day for his dinner, on which a mess of broken victuals was always afterwards served out to him.

12. Mr. C. Hughes, a country comedian, had a wig, which generally hung on a peg in one of his rooms: he one day lent the wig to a brother player, and some time afterwards called on him.

13. Mr. Hughes had his dog with him, and the man happened to have the borrowed wig on his head. Mr. Hughes staid a little while with his friend; but, when he left him, the dog remained behind.

14. For some time he stood looking full in the man's face; then making a sudden spring, he leaped on his shoulders, seized the wig, and ran off with it as fast as he could; and, when he reached home, he endeavoured, by jumping, to hang it up in its usual place.

15. The same dog was one afternoon passing through a field near Dartmouth, where a washerwoman had hung out her linen to dry.

16. He stopped, and surveyed one particular shirt with attention; then, seizing it, dragged it away through the dirt to his master, whose shirt it proved to be.

LESSON 23.—*The Handsome and Deformed Leg.*

1. There are two sorts of people in the world, who, with equal degrees of health and wealth, and the other comforts of life, become, the one happy, and the other miserable.

2. This arises very much from the different views in which they consider things, persons, and events; and the effects of those different views upon their minds.

3. In whatever situation men can be placed, they may find conveniences and inconveniences: in whatever company, they may find persons and conversation more or less pleasing.

4. At whatever table, they may meet with meats and drinks of better and worse taste, dishes better and worse dressed: in whatever climate, they will find good and bad administration of the laws: in whatever poem, or work of genius, they may see faults and beauties: in almost every face and every person, they may discover fine features and defects, good and bad qualities.

5. Under these circumstances, the two sorts of people above mentioned fix their attention; those who are disposed to be happy, on the conveniences of things, the

pleasant parts of conversation, the well-dressed dishes, the goodness of the wines, the fine weather, &c. and enjoy all with cheerfulness.

6. Those who are disposed to be unhappy, think and speak only of the contraries.

7. Hence they are continually discontented with themselves; and, by their remarks, sour the pleasures of society, offend personally many people, and make themselves everywhere disagreeable.

8. If this turn of mind were founded in nature, such unhappy persons would be the more pitied.

9. But the disposition to criticise, and to be disgusted, is perhaps taken up originally by imitation, and unawares grows into a habit, which, though at present strong, may nevertheless be cured, when those who have it are convinced of its bad effects on their felicity. I hope this little admonition may be of service to them, and put them on changing a habit which, though in the exercise it is chiefly an act of imagination, yet has serious consequences in life, as it brings on real griefs and misfortunes.

10. For, as many are offended by, and nobody loves this sort of people, no one shows them more than the most common civility and respect, and scarcely that; and this frequently puts them out of humour, and draws them into disputes and contentions.

11. If they aim at obtaining some advantage in rank or fortune, nobody wishes them success, or will stir a step or speak a word to favour their pretensions.

12. If they incur public censure or disgrace, no one will defend or excuse them; and many join to aggravate their misconduct, and render them completely odious.

13. If these people will not change this bad habit, and condescend to be pleased with what is pleasing, without fretting themselves or others about the contra-

ries, it is good for others to avoid an acquaintance with them, which is always disagreeable, and sometimes very inconvenient; especially when one finds one's self entangled in their quarrels.

14. An old philosophical friend of mine was grown, from experience, very cautious in this particular, and carefully avoided any intimacy with such people.

15. He had, like other philosophers, a thermometer to show him the heat of the weather, and a barometer to mark when it was likely to prove good or bad; but, there being no instrument invented to discover at first sight this unpleasing disposition in a person, he for that purpose made use of his legs, one of which was remarkably handsome, the other, by some accident, crooked and deformed.

16. If a stranger, at the first interview, regarded his ugly leg more than his handsome one, he doubted him. If he spoke of it, and took no notice of the handsome leg, that was sufficient to determine my philosopher to have no further acquaintance with him.

17. Everybody has not this two-legged instrument; but every one, with a little attention, may observe signs of that carping, fault-finding disposition, and take the same resolution of avoiding the acquaintance of those infected with it.

18. I therefore advise those critical, querulous, and discontented and unhappy people, if they wish to be respected and beloved by others and happy in themselves, to leave off looking at the ugly leg.

LESSON 24.—*Catharina, Empress of Russia.*

1. *Catharina Alexowna,* born near Dorpat, a little city in Livonia, was heir to no other inheritance than the virtues and frugality of her parents.

2. Her father being dead, she lived with her aged mother in their cottage covered with straw; and both, though very poor, were very contented.

3. Here, retired from the gaze of the world, by the labours of her hands she supported her parent, who was now incapable of supporting herself.

4. While Catharina spun, the old woman would sit by and read some book of devotion. When the fatigues of the day were over, both would sit down contentedly by the fire-side, and enjoy their frugal meal.

5. Though Catharina's face and person were models of perfection, yet her whole attention seemed bestowed upon her mind. Her mother taught her to read; and an old Lutheran minister instructed her in the maxims and duties of religion.

6. Nature had furnished her not only with a ready, but a solid turn of thought; not only with a strong, but a right understanding.

7. Her virtues and accomplishments procured her several solicitations of marriage from the peasants of the country: but their offers were refused; for she loved her mother too tenderly to think of a separation.

8. Catharina was fifteen years old when her mother died. She then left her cottage, and went to live with the Lutheran minister by whom she had been instructed from her childhood.

9. In his house she resided, in quality of governess to his children; at once reconciling in her character uncommon prudence with surprising vivacity.

10. The old man, who regarded her as one of his own children, had her instructed in the elegant parts of female education, by the masters who attended the rest of his family.

11. Thus she continued to improve, till he died; by which accident she was reduced to her former poverty.

LESSON 25.—*Catharina, Empress of Russia, (continued.)*

1. The country of Livonia was at that time wasted by war, and lay in a miserable state of desolation. Those calamities are ever most heavy upon the poor; wherefore Catharina, though possessed of so many accomplishments, experienced all the miseries of hopeless indigence.

2. Provisions becoming every day more scarce, and her private stock being entirely exhausted, she resolved at last to travel to Marienburgh, a city of greater plenty.

3. With her scanty wardrobe packed up in a wallet, she set out on her journey on foot.

4. She was to walk through a region miserable by nature, but rendered still more hideous by the Swedes and Russians, who, as each happened to become masters, plundered it at discretion: but hunger had taught her to despise the dangers and fatigues of the way.

5. One evening upon her journey, as she had entered a cottage by the way-side, to take up her lodging for the night, she was insulted by two Swedish soldiers.

6. They might probably have carried their insults into violence, had not a subaltern officer, accidently passing by, come to her assistance.

7. Upon his appearing the soldiers immediately desisted; but her thankfulness was hardly greater than her surprise, when she instantly recollected, in her deliverer, the son of the Lutheran minister, her former instructer, benefactor, and friend.

8. This was a happy interview for Catharina. The little stock of money she had brought from home was

by this time quite exhausted; her clothes were gone, piece by piece, in order to satisfy those who had entertained her in their houses.

9. Her generous countryman therefore parted with what he could spare, to buy her clothes; furnished her with a horse, and gave her letters of recommendation to a faithful friend of his father's, the superintendent of Marienburgh.

LESSON 26.—*Catharina, Empress of Russia, (continued.)*

1. The beautiful stranger was well received at Marienburgh. She was immediately admitted into the superintendent's family as governess to his two daughters; and, though but seventeen, showed herself capable of instructing her sex, not only in virtue, but in politeness.

2. Such were her good sense and beauty, that her master in a short time offered her his hand; which, to his great surprise, she thought proper to refuse.

3. Actuated by a principle of gratitude, she was resolved to marry her deliverer only; though he had lost an arm, and was otherwise disfigured by wounds received in the service.

4. In order therefore to prevent further solicitations from others, as soon as the officer came to town upon duty, she offered him her hand, which he accepted with joy; and their nuptials were accordingly solemnized.

5. But all the lines of her fortune were to be striking. The very day on which they were married, the Russians laid siege to Marienburgh. The unhappy soldier was immediately ordered to an attack, from which he never returned.

6. In the meantime, the siege went on with fury, aggravated on one side by obstinacy, on the other by revenge.

7. The war between the two northern powers at that time was truly barbarous: the innocent peasant and the harmless virgin often shared the fate of the soldier in arms.

8. Marienburgh was taken by assault; and, such was the fury of the assailants, that not only the garrison, but almost all the inhabitants, men, women, and children, were put to the sword.

9 At length, when the carnage was pretty well over, Catharina was found hid in an oven. She had hitherto been poor, but free. She was now to conform to her hard fate, and learn what it was to be a slave.

10. In this situation, however, she behaved with piety and humility, and, though misfortunes had abated her vivacity, yet she was cheerful.

11 The fame of her merit and resignation reached even prince Menzikoff, the Russian general He desired to see her, was pleased with her appearance, bought her from the soldier, her master, and placed her under the direction of his own sister.

12. Here she was treated with all the respect which her merit deserved, while her beauty every day improved with her good fortune.

LESSON 27.—*Catharina, Empress of Russia, (concluded.)*

1. She had not been long in this situation when, Peter the Great paying the prince a visit, Catharina happened to come in with some dried fruits, which she served round with peculiar modesty.

2. The mighty monarch saw her, and was struck with her beauty. He returned the next day, called for the beautiful slave; asked her several questions; and found the charms of her mind superior even to those of her person.

3. He had been forced, when young, to marry from motives of interest: he was now resolved to marry pursuant to his own inclinations.

4. He immediately inquired into the history of the fair Livonian, who was not yet eighteen. He traced her through the vale of obscurity, through the vicissitudes of her fortune; and found her truly great in them all.

5. The meanness of her birth was no obstruction to his design The nuptials were solemnized in private; the prince declaring to his courtiers, that virtue was the most proper ladder to a throne.

6. We now see Catharina, raised from the low mud-walled cottage, to be empress of the largest kingdom upon earth.

7. The poor solitary wanderer is now surrounded by thousands, who find happiness in her smile. She, who formerly wanted a meal, is now capable of diffusing plenty through whole nations.

8. To her good fortune she owed a part of this pre-eminence, but to her virtues more.

9. She ever after retained those great qualities which first placed her on a throne: and, while the extraordinary prince, her husband, laboured for the reformation of his male subjects, she studied in her turn, the improvement of her own sex.

10. She altered their dresses; introduced mixed assemblies, instituted an order of female knighthood, promoted piety and virtue; and at length, when she had greatly filled all the stations of empress, friend, wife, and mother, died without regret,—regretted by all.